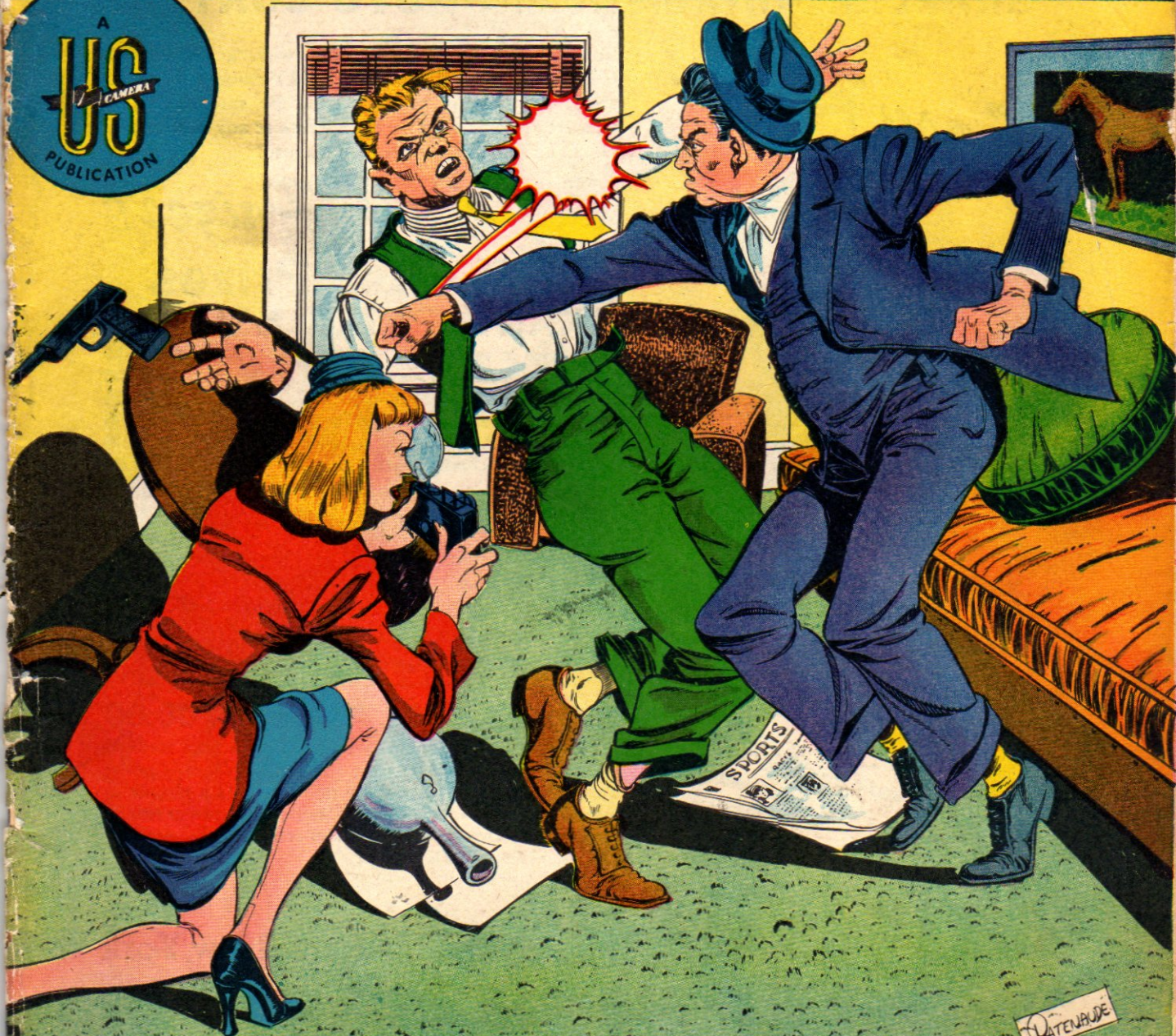


CAMERA

10¢ COMICS

NO. 8



KATENAUDE



WEB COMIC
UNIVERSE.COM

Enter the \$5000.00



GRAFLEX All-American PHOTO CONTEST

Easy Rules:

You may enter pictures taken with a GRAFLEX, GRAPHIC, CROWN or CENTURY camera in any or all of the ten big photo classes! Be sure to send a properly filled-out Entry Form—free at any Authorized GRAFLEX Dealer—with each picture!

Big Cash Prizes!

133 Cash Prizes
GRAND PRIZE \$500.00

First Prize in each class.....	\$200.00
Second Prize in each class.....	100.00
Third Prize in each class.....	50.00
10 Honor Awards in each class.....	5.00
Special Press Award.....	400.00
Special High School Award.....	100.00



Special

10 PHOTO CLASSIFICATIONS

- | | |
|----------------------------|-------------------|
| 1. Portraits | 6. Animals & Pets |
| 2. Pictorial | 7. Color |
| 3. Action | 8. Sports |
| 4. Industrial & Scientific | 9. Humor |
| 5. Children & Babies | 10. Spot News |

HIGH SCHOOL AWARD \$100.00

For the best picture submitted by a High School student, GRAFLEX, Inc., will award a special \$100.00 cash prize! This is in addition to regular prizes. Here's a chance to make some real money. Start collecting your photo entries today! Get complete Contest Rules and Entry Forms from your local GRAFLEX Dealer.

GRAFLEX, INC., Rochester 8, New York

Visit Graflex Information Centers — At 50 Rockefeller Plaza, N. Y., and 3045 Wilshire Boulevard, Los Angeles, Cal.

Camera Comics, Spring, 1946. Published quarterly by U. S. Camera Publishing Corporation at 4600 Diversey Avenue, Chicago, Illinois. Editorial and Executive offices at 420 Lexington Avenue, New York 17, New York. Volume 2, No. 2. Subscription price 60c per year, single copies 10c. Entered as second class matter April 27, 1945 at the post office at Chicago, Illinois, under the act of March 3rd, 1879. Printed in U. S. A. Copyright 1946 by U. S. Camera Publishing Corporation.

JIM LANE

INSURANCE INVESTIGATOR



JIM LANE, ACE INSURANCE INVESTIGATOR IS ASSIGNED TO A TASK WHICH INVOLVES HIM WITH A MATCHED PEARL NECKLACE, A BEAUTIFUL COUNTESS AND THE BUSINESS END OF A LUGER PISTOL. INGREDIENTS WHICH GUARANTEE AN EXCITING TIME FOR ALL HANDS!

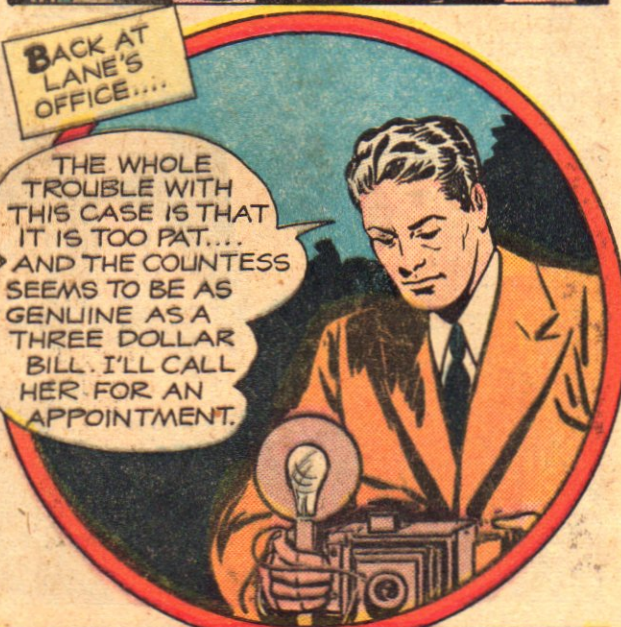
JIM LANE AND THE ACME INSURANCE COMPANY SEEM TO HAVE THEIR HANDS FULL.....

TAKE IT EASY, COUNTESS... MR. BIRNS REPRESENTS THE ACME INSURANCE COMPANY... HE OUT TO HELP YOU.

OH, MESSIEURS... EET EEZ TERRIBLE.... MY BEAUTIFUL NECKLACE GONE! GONE!

THAT'S RIGHT, MA'AM... YOU HAVE NOTHING TO WORRY ABOUT. THIS SEEMS TO BE AN OPEN AND SHUT CASE. THE NECKLACE WAS INSURED FOR ONE HUNDRED THOUS- AND DOLLARS. WE WILL PAY.







SOME TIME LATER...

IF THE SNOOPER GIVES US ANY TROUBLE...

NEVER MIND THE GUN. I'LL HANDLE HIM.



COUNTESS DE LA ROCKMONT

WELL, HERE GOES NOTHING!



COME IN, MONSIEUR LANE. I WOULD LIKE YOU TO MEET COUNT ALFREDO CATILLE

HOW DO YOU DO, SIR?

CHARMED.



WHAT IS IT YOU WEESH, MONSIEUR LANE?

WELL, UH... DO YOU HAVE A PICTURE OF THE NECKLACE... PERHAPS ONE OF YOU WEARING IT?



'ERE IS ONE. EET WAS TAKEN IN FRONT OF ZE FIREPLACE.

HMM... SWELL. NOW MAY I HAVE A FEW SHOTS OF THIS ROOM?



BUT OF COURSE. ANYTHING YOU WEESH.

THANKS.



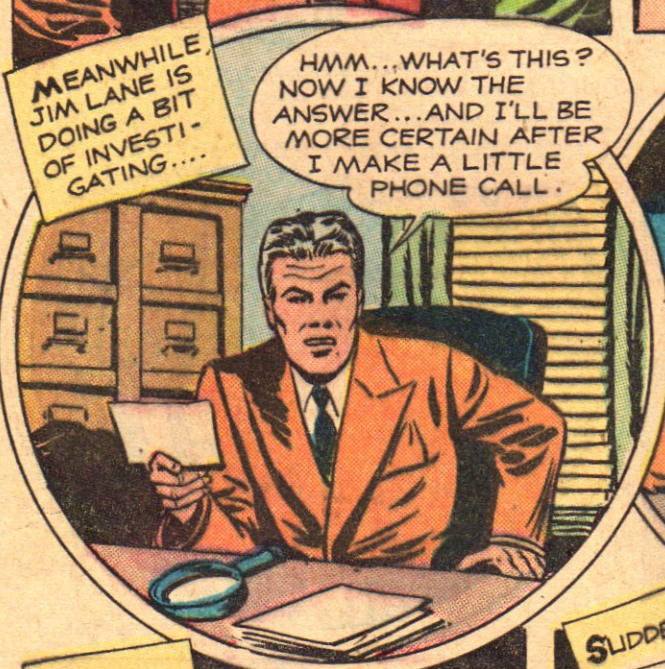
THERE / THAT'S THE LAST ONE, / THANK YOU AGAIN, / MAY I TAKE THAT PORTRAIT?

BUT OF COURSE.



YOU SEE, AL? IT WAS AS SIMPLE AS ROLLING OFF A LOG.

YEAH. BUT I DON'T LIKE HIM SNOOPING AROUND ANYWAY.

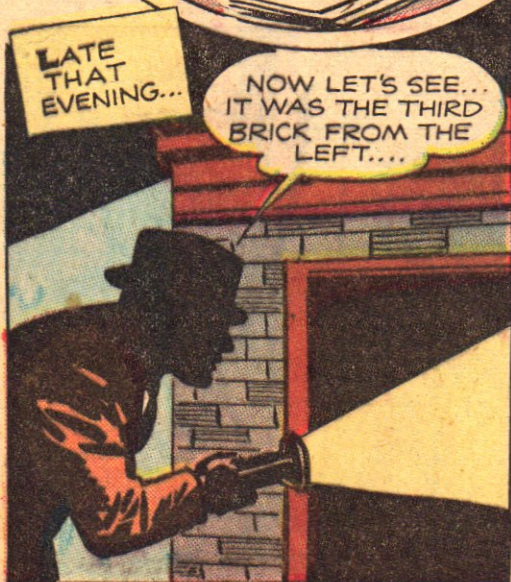


MEANWHILE JIM LANE IS DOING A BIT OF INVESTIGATING....

HMM...WHAT'S THIS? NOW I KNOW THE ANSWER...AND I'LL BE MORE CERTAIN AFTER I MAKE A LITTLE PHONE CALL.



POLICE HEAD-QUARTERS? MAY I SPEAK TO DETECTIVE SERGEANT KIEFER? HELLO, HAL... JIM LANE... CAN I SEE YOU FOR A FEW MINUTES? THANKS. SO LONG.



LATE THAT EVENING...

NOW LET'S SEE... IT WAS THE THIRD BRICK FROM THE LEFT....



SLIDENLY...

ALL RIGHT, LANE...REACH!

WELL, ANOTHER MINUTE AND I'D HAVE HAD THE NECKLACE.

THEN YOU KNOW ABOUT THE SECRET DRAWER IN THE FIREPLACE? BUT HOW?

SIMPLE ENOUGH. ON THAT PORTRAIT YOU SO OBLIGINGLY GAVE ME, ONE OF THE BRICKS WAS SLIGHTLY CROOKED. ON THE PICTURES I TOOK, THE SAME BRICK WAS STRAIGHT. PRESTO! IT HIT ME! A SECRET DRAWER!



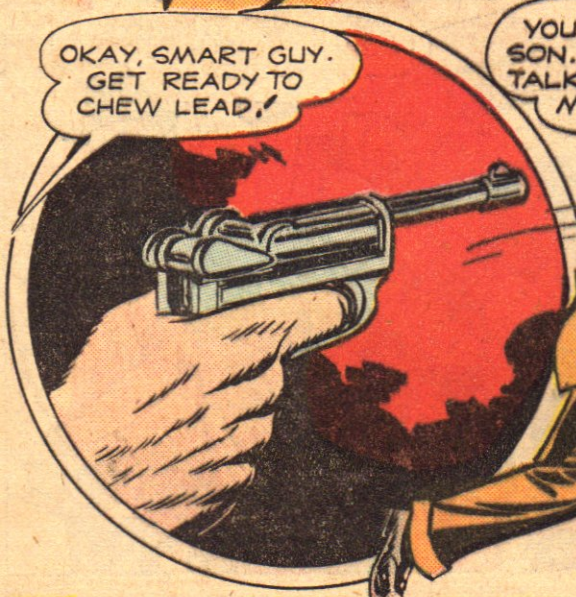
YEAH. AND WHAT ELSE DO YOU KNOW... THAT WE AIN'T WHAT WE'RE SUPPOSED TO BE?



SURE. I CHECKED ON THE COUNTESS... AND YOU TOO... SUSIE AND AL JONAS.. JEWEL THIEVES PAR EXCELLENCE.



OKAY, SMART GUY. GET READY TO CHEW LEAD!



YOU'RE GETTING SOFT, SON... AND YOU TALK TOO MUCH.



OOF!

I THINK WE'LL GET ALONG BETTER WITHOUT THAT!



OH!!

THE PISTOL....





STAND STILL,
LANE....
OH!!

TUT, TUT...
MUSTN'T
POINT...



CHIVALRY IS DEAD!
I'M HITTING A LADY...
SO I'M NOT A
BOY SCOUT.

AAAH!

MOMENTS LATER THE POLICE
ARRIVE.....

AHA... THE
DRAWER! AND
THERE IS
THE NECKLACE.



I FINISHED THE JOB.
NOW TO GET IN TOUCH
WITH BIRNS...

NEXT DAY...



NICE WORK, JIM.
INCIDENTALLY, THAT
NECKLACE WAS STOLEN
IN CINCINNATI LAST YEAR.
WE'VE BEEN TRYING TO
TRACE
IT.

YEAH. THOSE
TWO WERE
PRETTY
CAGEY
CUSTOMERS.

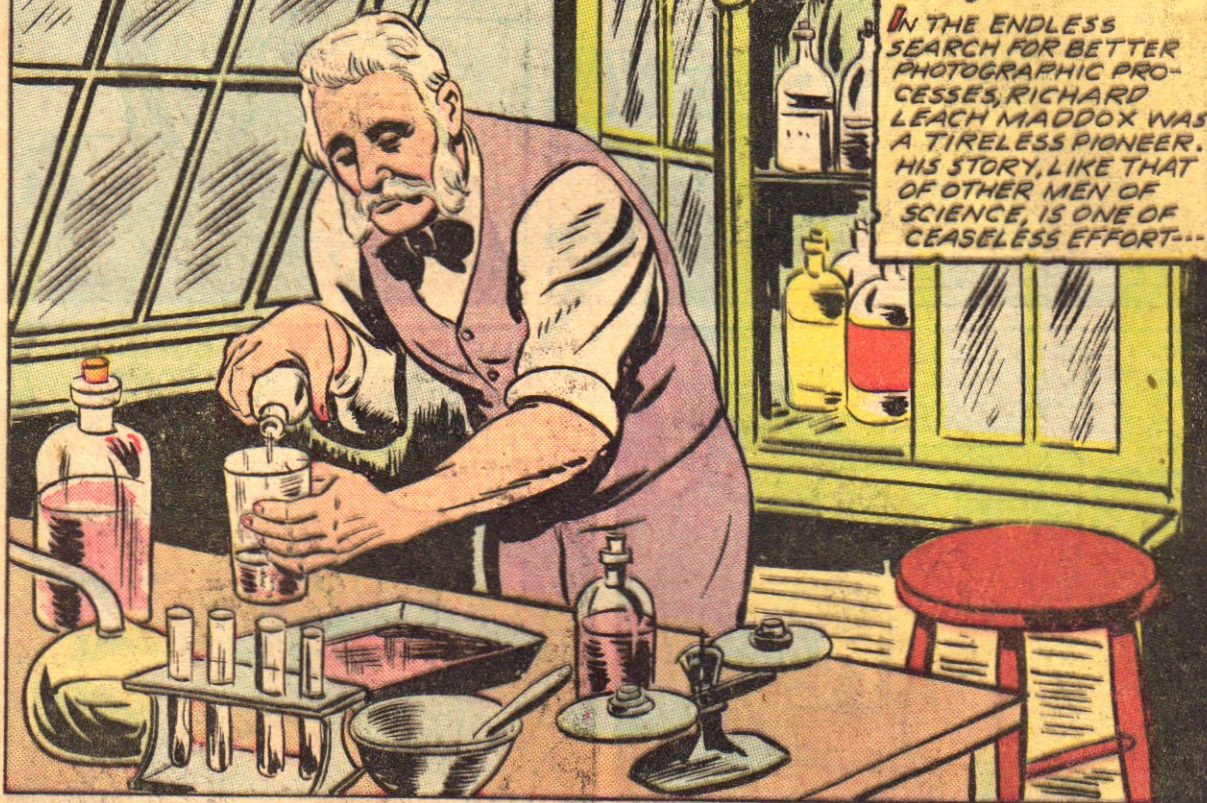


BUT EVERY
GROOK GETS
TOO SMART
FOR HIS
OWN GOOD.

Richard Leach Maddox

Pioneer Of Photography

IN THE ENDLESS SEARCH FOR BETTER PHOTOGRAPHIC PROCESSES, RICHARD LEACH MADDOX WAS A TIRELESS PIONEER. HIS STORY, LIKE THAT OF OTHER MEN OF SCIENCE, IS ONE OF CEASELESS EFFORT...



TODAY, WE TAKE A LOT FOR GRANTED, FOR INSTANCE...

HELLO, HARRY. I HAVE SOME FILMS I'D LIKE TO HAVE DEVELOPED!

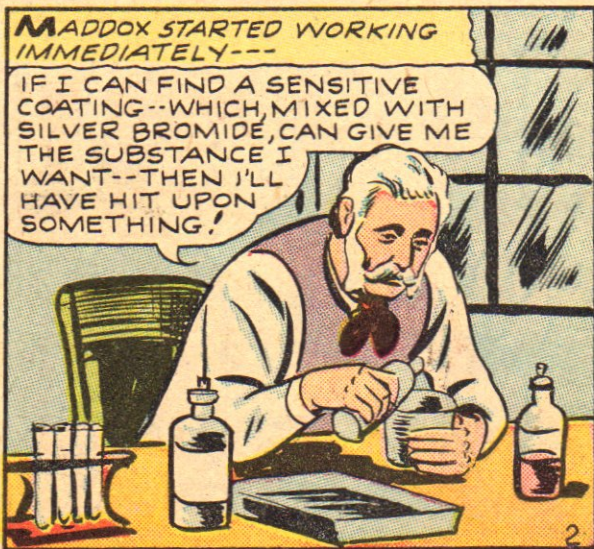
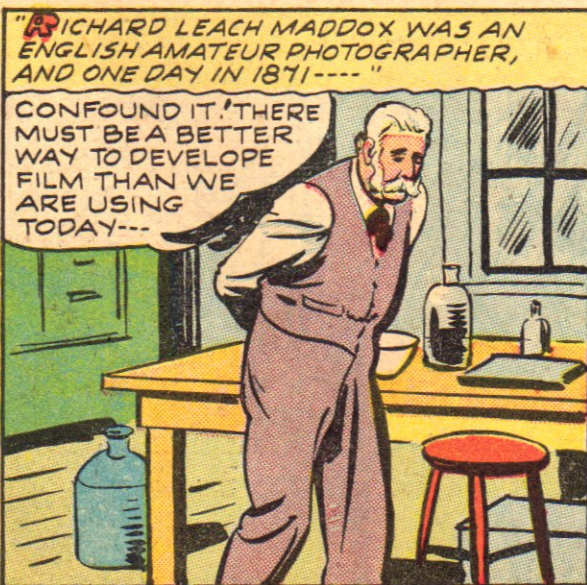
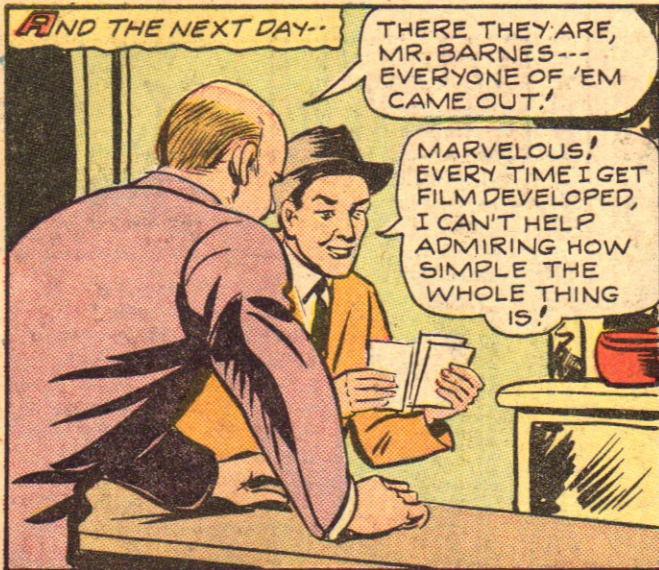
CERTAINLY, MR. BARNES!

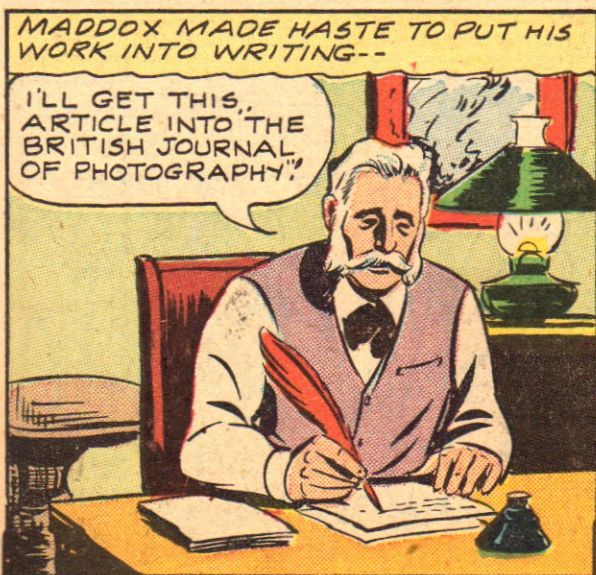
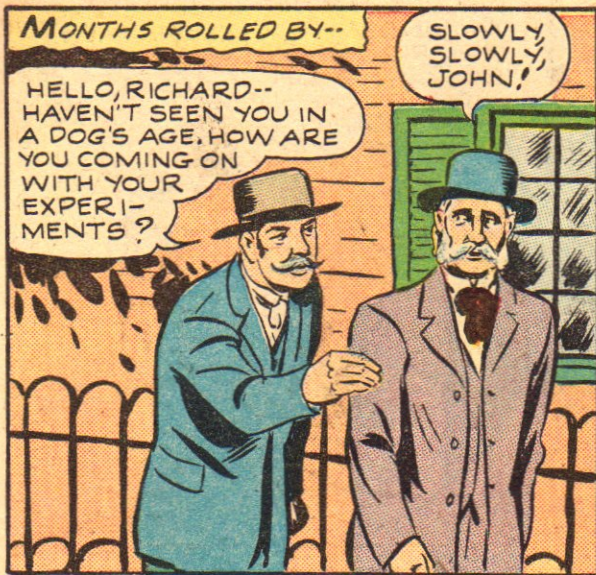


WHEN WILL THEY BE DEVELOPED?

YOU CAN PICK THEM UP TOMORROW, MR. BARNES.



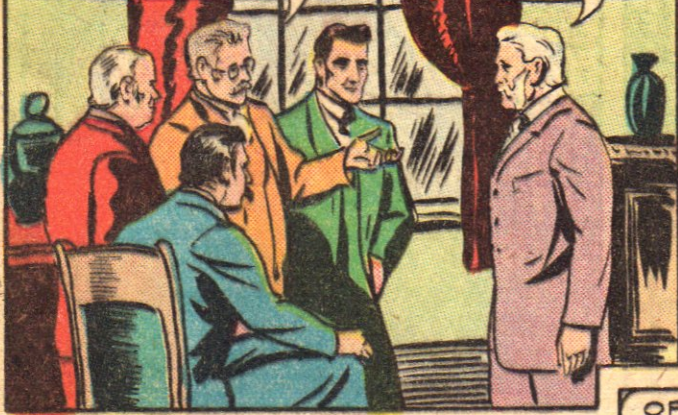




THERE WAS ONE GREAT FLAW IN MADDOX'S METHOD----

MADDOX, WE LIKE YOUR GELATIN EMULSION IDEA--BUT WE FIND A GREAT FAULT!

WHAT IS THAT, GENTLEMEN?



THE PROCESS IS VERY SLOW AND QUITE COSTLY.



I REALIZE THAT, GENTLEMEN--AND TO TELL THE TRUTH, I DON'T KNOW HOW TO OVERCOME IT!

WELL, DON'T BE DISHEARTENED! IT IS SUITABLE FOR CONTACT PRINTING, AND IS THE BEST METHOD WE HAVE USED TO DATE!



OF COURSE--PHOTOGRAPHY HAD NOT DEVELOPED TO A SUFFICIENT POINT BY THAT TIME FOR MADDOX TO KNOW WHAT WAS WRONG WITH HIS METHOD. IT WAS SIMPLE. HE USED TOO MUCH SILVER, AND DID NOT REALIZE HE COULD WASH IT AWAY WHEN DEVELOPING!



HOW INTERESTING, MR. THOMAS---

PHOTOGRAPHY IS A FASCINATING SUBJECT, MR. BARNES!



SO LONG THOMAS--AND YOU TOO, HARRY. I'LL SURELY READ YOUR BOOK ON THE HISTORY OF PHOTOGRAPHY WHEN IT IS PUBLISHED.

THANK YOU, MR. BARNES!



ART FENTON

WHEN ART FENTON, ACE OPERATIVE OF THE EPH TUTTLE DETECTIVE AGENCY, GETS ON A CASE HE HANGS ON UNTIL IT IS BROKEN.... BUT HERE, HE GETS TIED UP IN KNOTS TRYING TO LEARN THE SECRET OF "THE INCA GOD!"



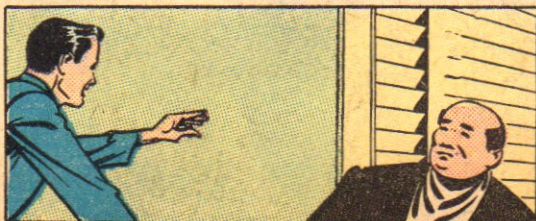
IN THE HEAD OFFICE OF THE EPH TUTTLE AGENCY

WHAT'S THE PITCH, EPH?

HERE'S A CASE THAT'S RIGHT DOWN YOUR ALLEY, NOBODY KNOWS WHAT IT'S ABOUT! EVER HEAR OF DENIS PHELPS!

SURE. HE WAS AN EXPLORER--RAN AROUND IN THE JUNGLES OF SOUTH AMERICA WITH A CAMERA. SO WHAT HAS THAT TO DO WITH ME?

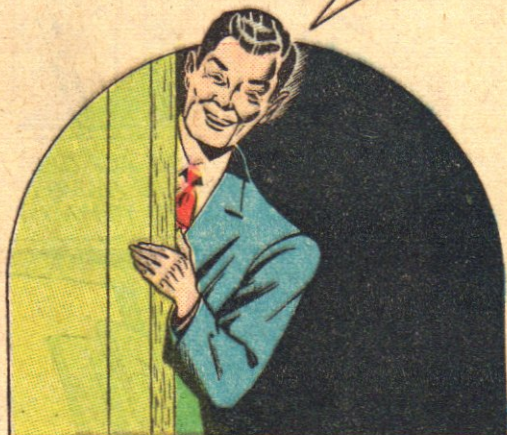
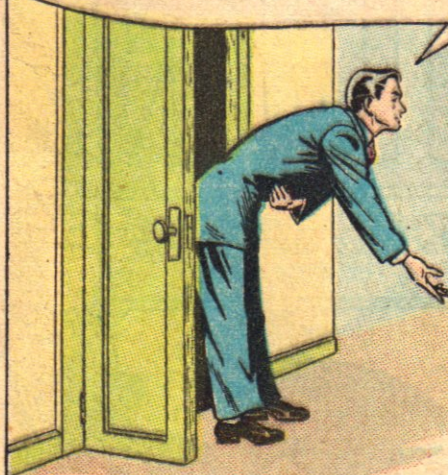
NOTHING. EXCEPT THAT HIS SISTER THINKS SOMEBODY IS AFTER SOMETHING THAT PHELPS BROUGHT BACK FROM PERU ON ONE OF HIS TRIPS. ALSO, THAT SHE IS IN IMMINENT DANGER OF GETTING KNOCKED OFF! NOW--HIRELING--GO!! THE ADDRESS IS 185 ARROW PLACE



OKAY, MASTER. I GO! BUT I'LL BE BACK!! YES I WILL
...AND BEFORE I LEAVE-- TELL ME ONE THING!

AREN'T YOU AFRAID THAT YOU'LL
RUIN YOUR V-MAN FIGURE WITH
ALL THAT FOOD???

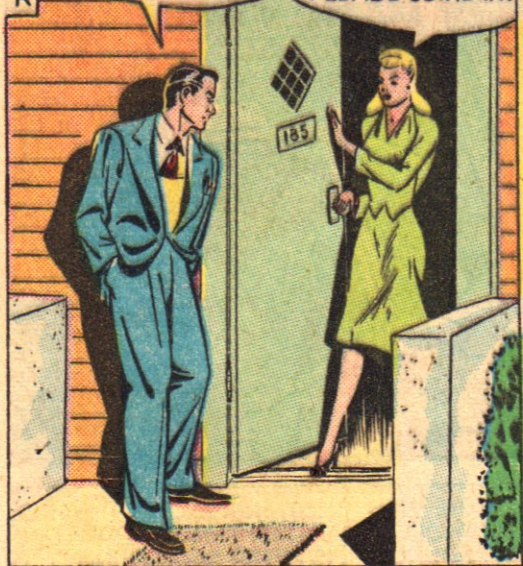
SURE!



L
A
T
E
R

I'M ART FENTON,
OF THE EPH
TUTTLE AGENCY...

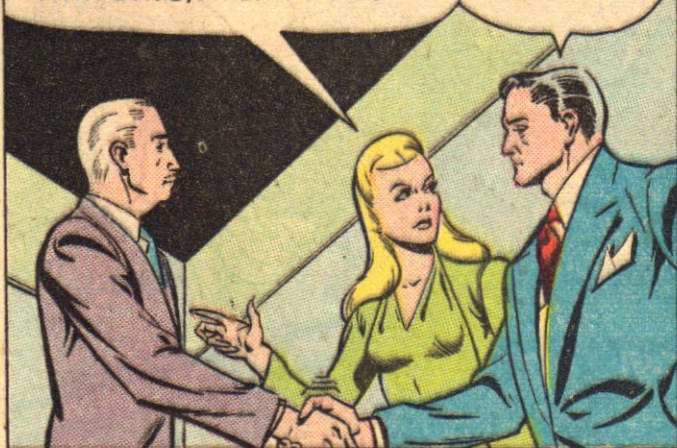
HELLO, I'M
HELEN PHELPS
WOULDN'T YOU
PLEASE COME IN.



INSIDE...

THIS IS MR. WARREN
WENDELL, MY BROTHER'S FRIEND
AND ASSOCIATE. WHO WAS
WITH DENIS, WHEN HE DIED.

GLAD
TO KNOW
YOU,
WENDALL!

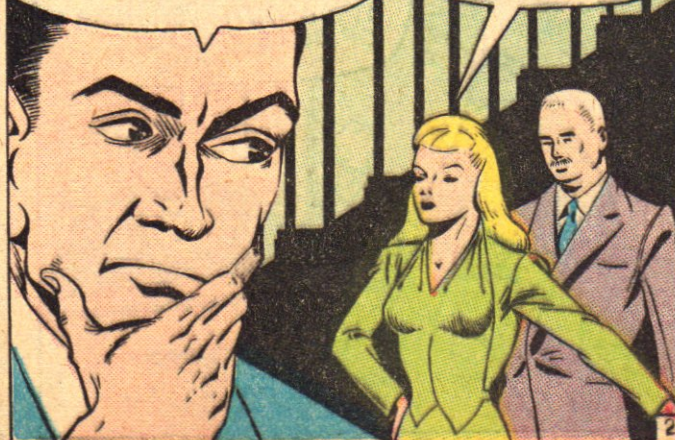
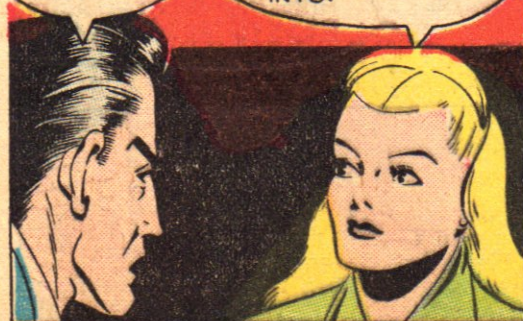


HMMM. THAT SOUNDS PLENTY
SERIOUS. WHAT DO YOU
THINK THIS MYSTERIOUS
ASSAILANT IS AFTER?

I DON'T KNOW.
PERHAPS YOU
WOULD LIKE A LOOK
AROUND THE DEN.

NOW WHAT'S
ALL THIS
ABOUT, MISS.
PHELPS

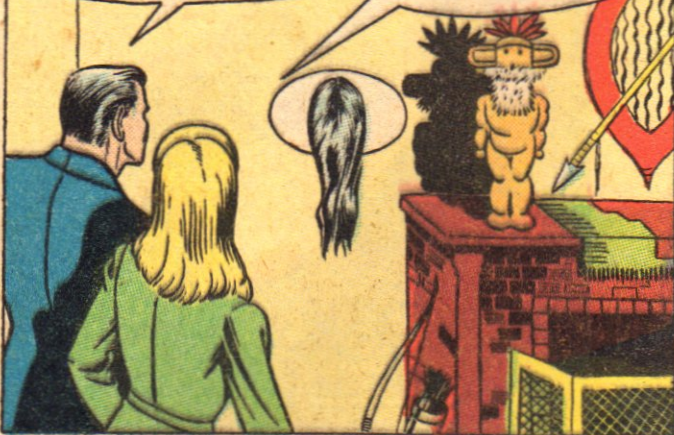
SOMEBODY IS TRYING
TO KILL ME, MR. FENTON.
AND MY BROTHER'S
DEN HAS BEEN BROKEN
INTO.



IN THE DEN...

WHAT AN INTERESTING BIT OF STATUARY. WHAT IS IT?

MY BROTHER BROUGHT IT BACK FROM PERU.



HMMM--THERE'S MORE HERE THAN MEETS THE EYE. I'VE A HUNCH THAT THIS IS WHAT OUR MAN IS AFTER.



WELL....THAT'S ALL FOR NOW, MISS PHELPS. I'LL HAVE TO THINK THIS BUSINESS OVER.

SEEMS TO ME THAT YOU ARE MOVING IN MYSTERIOUS WAYS YOURSELF, FENTON. THIS IS HARDLY AN INVESTIGATION.

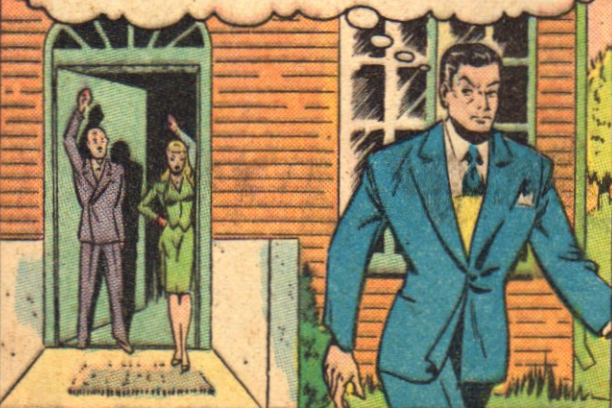


I THINK I'VE SEEN WHAT I NEED. YOU'LL HEAR FROM ME.

OKAY. YOU'RE THE DETECTIVE.



THEY DON'T KNOW IT. BUT LITTLE OLD FENTON IS COMING BACK--TONIGHT....AND WITH A CAMERA. A PICTURE IS WORTH TEN THOUSAND WORDS. AND I THINK THAT WHOEVER WAS AFTER WHAT'S IN THE DEN, WILL RETURN.



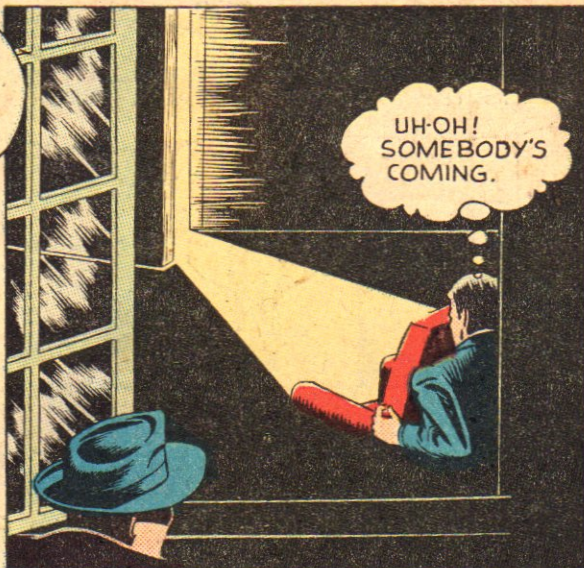
THAT NIGHT....

I'LL RIG UP A CAMERA BOOBY TRAP, AND WITH ANY LUCK, MAYBE I'LL CATCH MY MAN

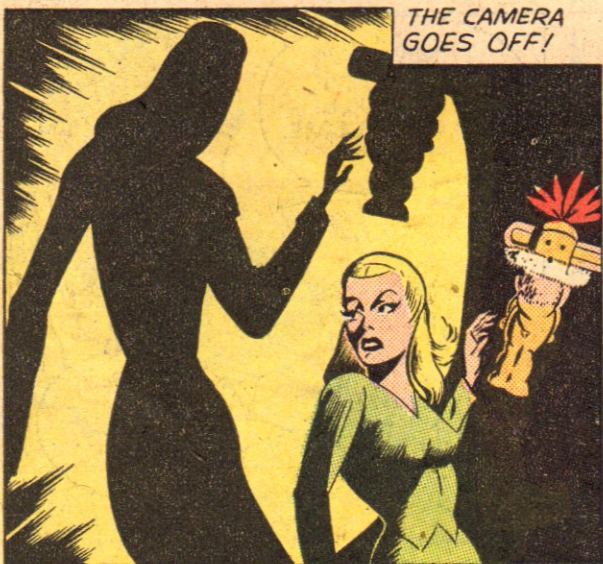




IT'S ALL
SET! NOW
FOR A
FADE OUT.



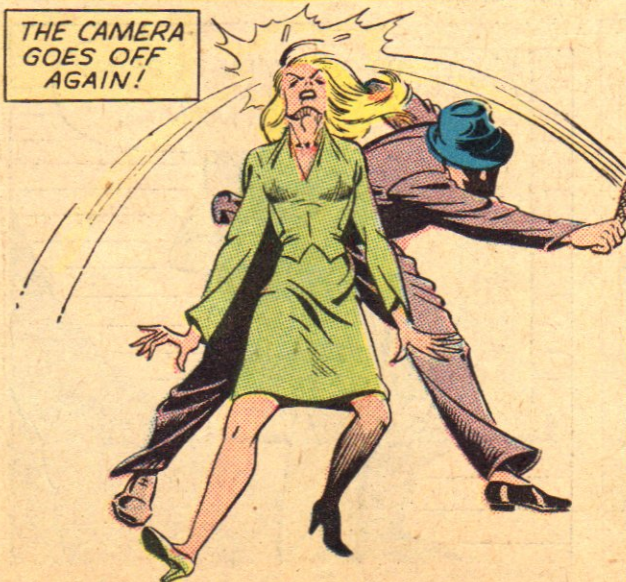
UH-OH!
SOMEBODY'S
COMING.



THE CAMERA
GOES OFF!

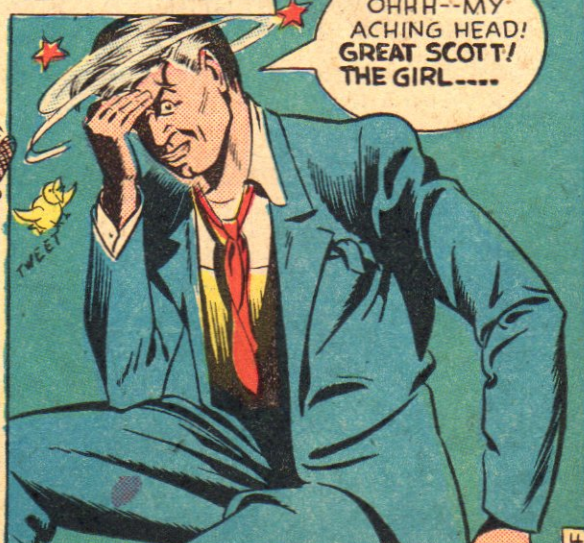


THIS'LL
HOLD YOU!



THE CAMERA
GOES OFF
AGAIN!

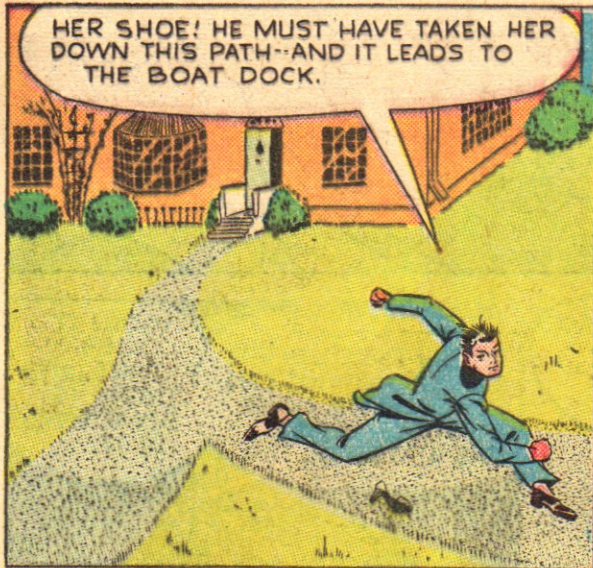
SOMETIME LATER...



OH--MY
ACHING HEAD!
GREAT SCOTT!
THE GIRL....

TWEET

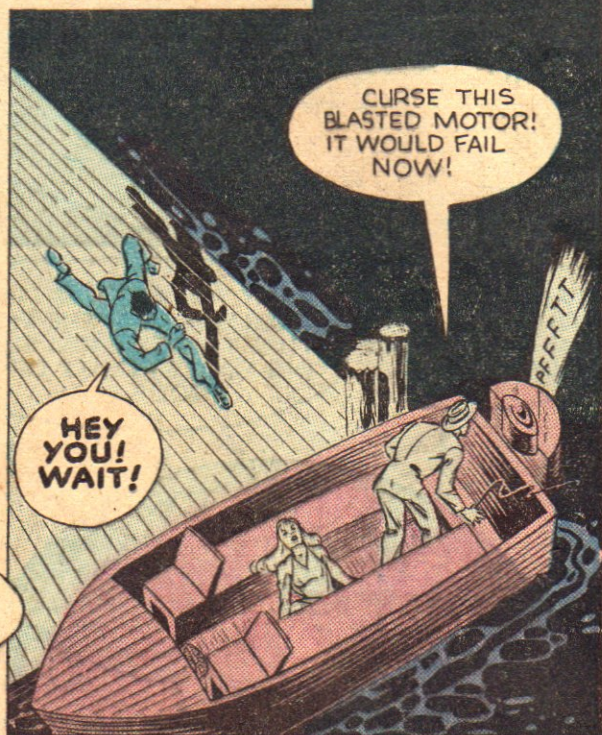
HER SHOE! HE MUST HAVE TAKEN HER
DOWN THIS PATH--AND IT LEADS TO
THE BOAT DOCK.



AT THE BOAT DOCK....

CURSE THIS
BLASTED MOTOR!
IT WOULD FAIL
NOW!

HEY
YOU!
WAIT!



SLUG ME FROM
BEHIND, WILL YOU??

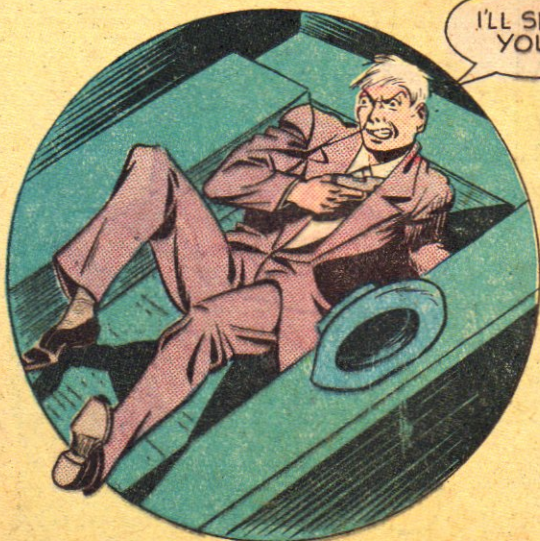
AND I'LL DO IT FROM
THE FRONT THIS
TIME!



OH
YEAH???



I'LL SHOW
YOU....



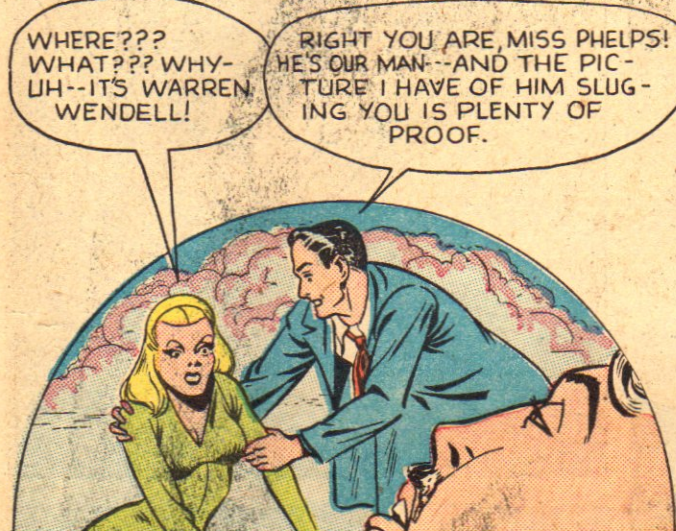
OH--SO YOU
WANT TO PLAY
ROUGH???

I'LL
KILL
YOU!





THAT'S
ALL
BROTHER--



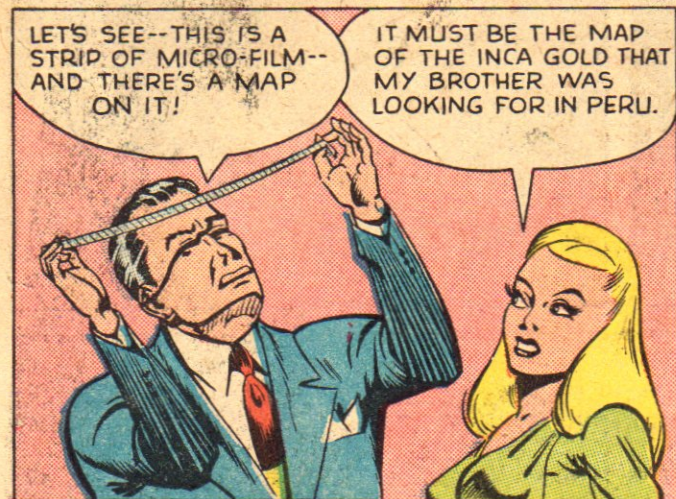
WHERE???
WHAT??? WHY--
UH--IT'S WARREN
WENDELL!

RIGHT YOU ARE, MISS PHELPS!
HE'S OUR MAN--AND THE PIC-
TURE I HAVE OF HIM SLUG-
GING YOU IS PLENTY OF
PROOF.

MUCH LATER....

WITH WENDELL IN THE
COPS' HANDS--WE CAN
CLEAR UP THE OTHER
MYSTERY--ABOUT
THE STATUETTE.

LOOK! IT
COMES
APART...AND
THERE IS
SOMETHING
IN IT.



LET'S SEE--THIS IS A
STRIP OF MICRO-FILM--
AND THERE'S A MAP
ON IT!

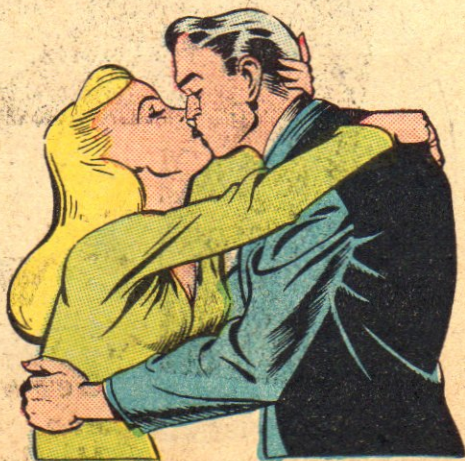
IT MUST BE THE MAP
OF THE INCA GOLD THAT
MY BROTHER WAS
LOOKING FOR IN PERU.

HOW CAN I
EVER THANK
YOU???

THIS'LL
DO
FINE!



THAT TIES IT UP!
WENDELL KNOCKED OFF
YOUR BROTHER--BUT HE
COULD NEVER FIND THE MAP.
WITH YOU OUT OF THE WAY
-THE PATH WOULD HAVE
BEEN CLEAR FOR HIM TO
SEARCH FOR IT.



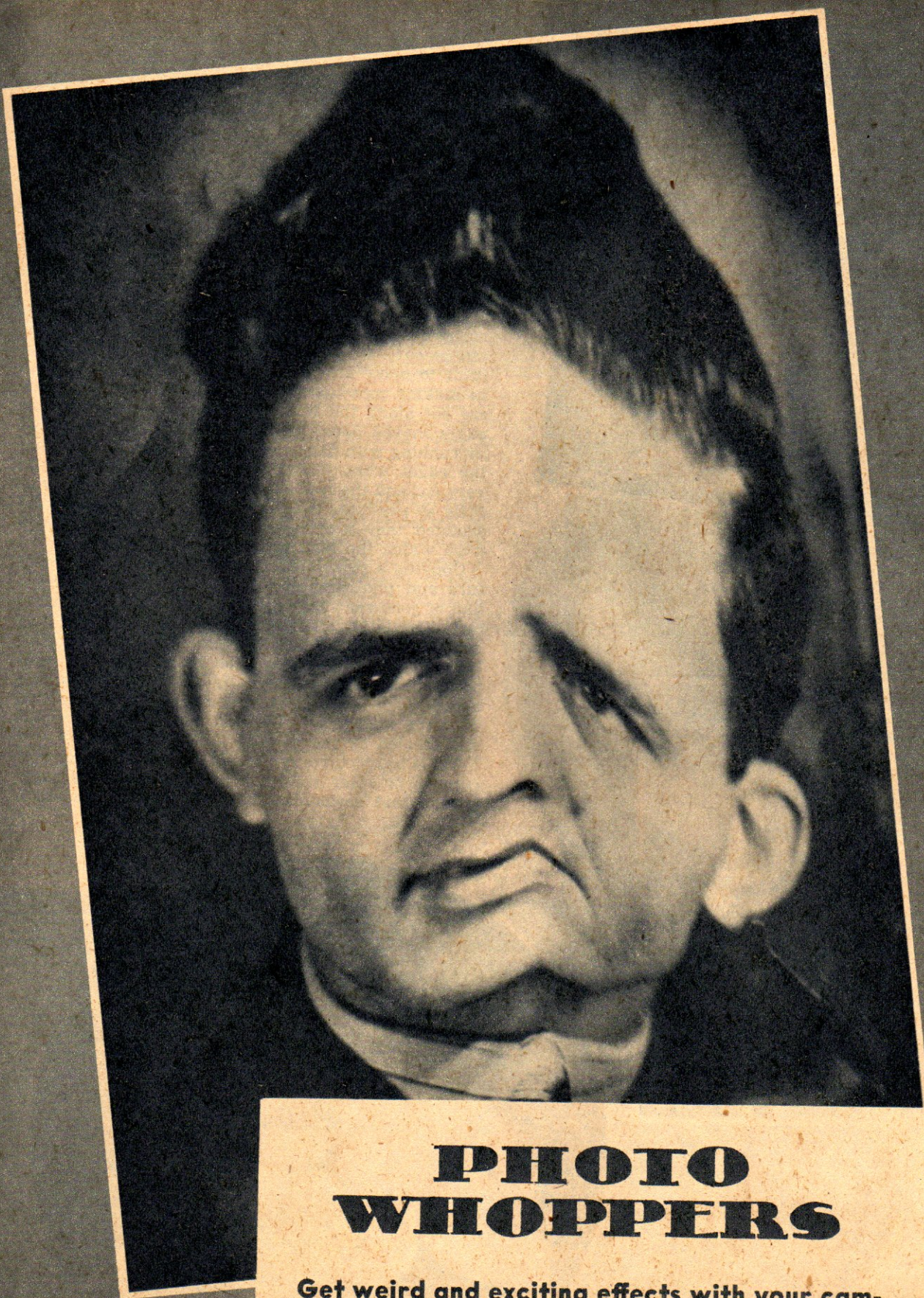


PHOTO WHOPPERS

Get weird and exciting effects with your camera. Practice the simple techniques that Paul Hadley uses to produce pictures like these. —▶



BABY HANDS. Tracing of child's hand was cut out in black paper, put in printing frame, and the paper was exposed. Negative of the baby was printed in the "hand."



SPACE ROCKET. The "rocket" is an enlarged shot of common wood screw cut from print and pasted to background print.

TWO NEGATIVES were used to make this print, one of baby and one of flower. Center of bloom was held to produce black area.

THE old saying that the camera doesn't lie has been disproved so often that practically no one believes it; in fact, under the skilled hands of movie and advertising photographers, the camera has been made to tell such photographic "whoppers" that people are inclined to disbelieve anything they see in a photograph.

The average camera user, with a little imagination, can produce some similarly amazing results in his pictures by use of such processes as double-exposure, pasteup, double printings or just plain tabletop photography, or combinations of two or more of these processes. Some interesting examples of what can be done are shown on these pages.

The pasteup process is one which will give the most varied results. Parts of two or more separate pictures can be cut out and pasted together on a background print to make anything that the mind can imagine. In making pasteups the pieces of the various prints are cut along the lines with sharp scissors and the edges shaved down very thin with a razor blade or by rubbing with fine sand paper. This is done so that the edges when pasted to the background will lie very flat and the raw edges of the paper will show as little as possible. After the pasteups have been assembled they are copied to make a new negative from which the final prints are made.

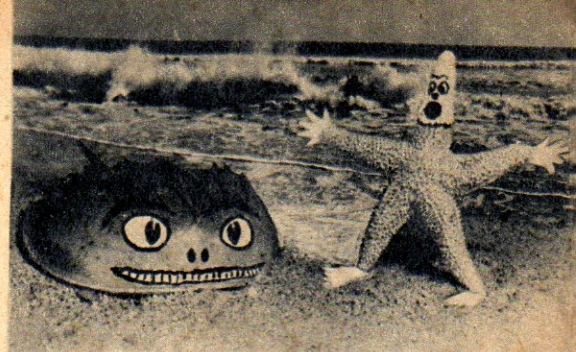
Copying a print means merely setting up the picture and photographing it with a camera, using a film of good contrast—such as press type or commercial. The latter are available in cut film sizes only and should be used in a camera with a ground glass back on which the image can be focused and composed before the exposure is made. The resulting negative is printed by contact or enlargement to produce the final print. The odd animal (above right) was created by the pasteup process.

Table top pictures are set up on a table, using toys, cutouts, or other objects, placed in front of a background that harmonizes with the idea of the scene.





TO CREATE THIS prehistoric creature, Hadley first made two prints of rooster's head, one in reverse. These were cut out under the eye and to the gill, joined together and pasted to print of white calf. Two portions of rooster neck make the "beard," the combs make the "ears."



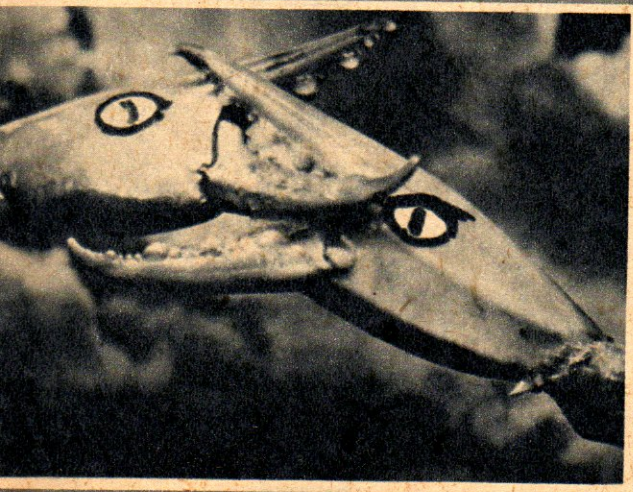
ON AN ENCHANTED shore. A tabletop setup using a starfish and small horseshoe crab. Faces were painted in black and white ink. Background is photo of a beach scene.

Such pictures are best made with a camera having a long bellows extension and ground glass screen so one can see just how the setup looks before making the shot. But other types of cameras will fit the bill—even box cameras—by using a supplementary portrait attachment. Large photo prints can often serve as scene-setting backgrounds for the tiny figures. A cloud print was used as a background for the "Battle" shot (below, left).

Reflection pictures can be weird, as in the example shown on first page of this story. The twisted face is the reflection of a normal face in a squeegee tin which was bent slightly to produce distortion. Paul Hadley, who made these shots and many more, says that anyone with imagination can do as well or better.



ANOTHER COMBINATION of two prints from the negative of the rooster's head. They were cut out along a different line than those Hadley used to make odd animal shown above.



THE BATTLE. Paul Hadley recorded this primeval struggle by photographing two crab claws against a cloud background. Hadley composed the scene in the groundglass of his 5x7 view camera before he shot.



THIS TABLE-TOP photo is simple to make. A doll, a seashell, and a string of pearls were arranged and photographed in front of a painted background. Even the popular box camera can be used for table-top shooting.

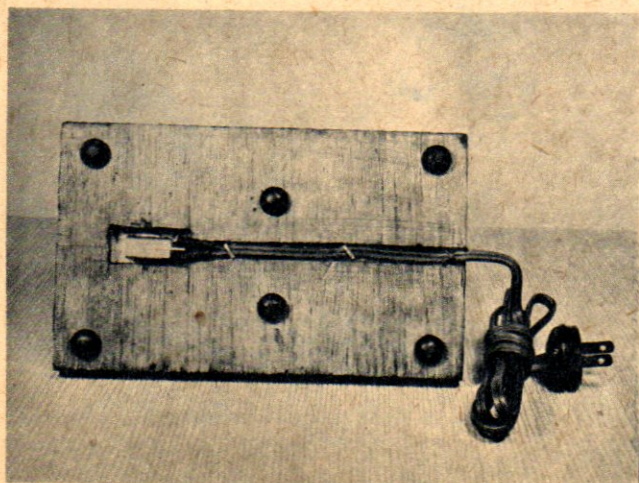
FOOT CONTROL SWITCH

**Make this simple, inexpensive setup
for your enlarger. It's fun to
work with . . . it's a cinch to build**

SINCE the new foot control switches first made their appearance in camera stores, most photographers, especially the enlarger fans, have had an eye to including one in their darkroom setup. But if you're like some people, you've been a bit hesitant about laying out the money asked on the price tags. If that's the case, then these plans to build your own foot control switch should serve you well. Like the factory



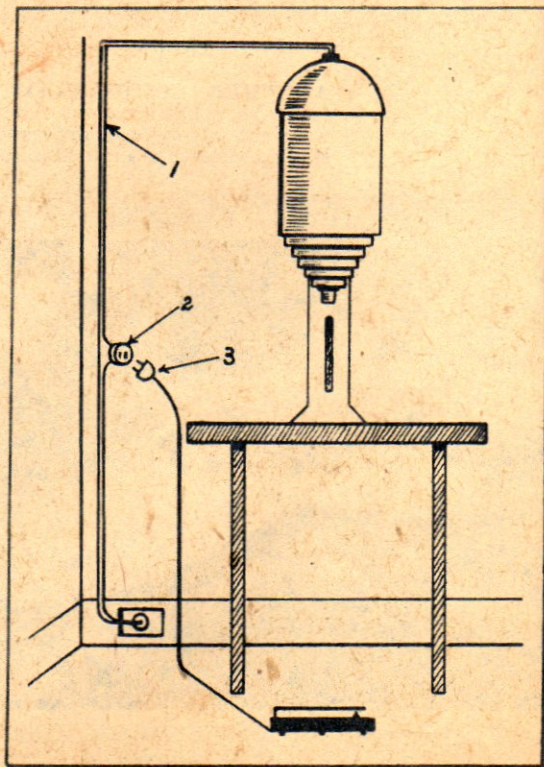
EASY-TO-BUILD foot control switch compares in operating efficiency with more expensive factory models.



BOTTOM VIEW shows the base of off-on switch (left) and cord to enlarger, held in groove with staples.

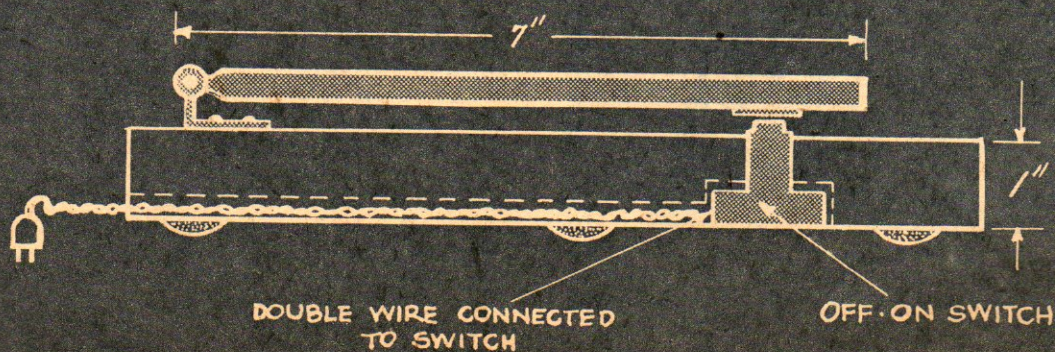
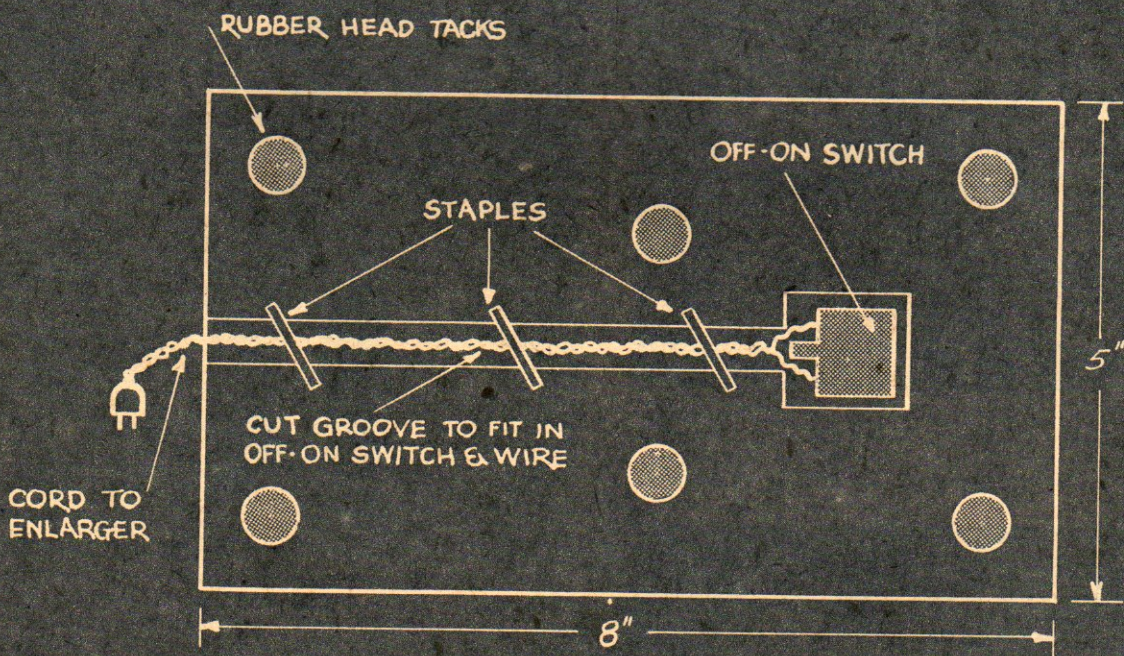
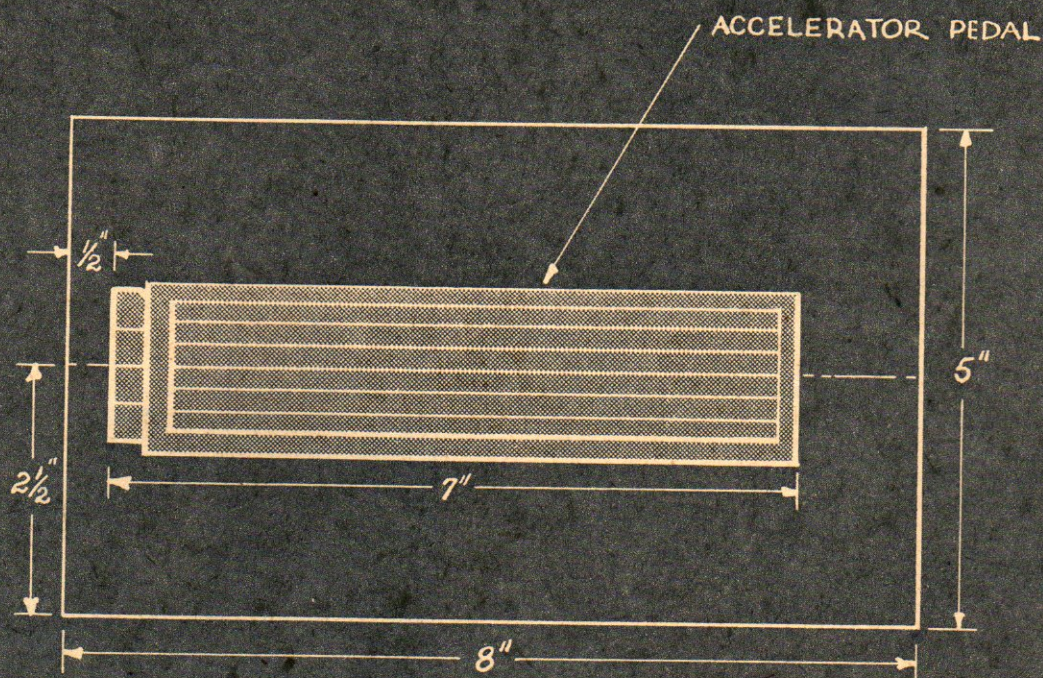
model, this switch, made by John Blécha, was designed so that the enlarger's light source can be controlled by a foot-controlled floor switch. The advantages, of course, are obvious: it allows both hands to be free at all times for paper manipulation, easel adjustments, and dodging. As the pictures and diagrams indicate, the setup is simple—easily constructed, at minimum cost; less than a dollar, in fact. So let's go ahead with the building. First, fill this bill of needed materials: a Ford accelerator pedal, off-on switch, length of wire, female plug, four rubber-headed tacks, three staples and a 5" x 8" x 1" board. Now, in what will be the base of the board, whittle a groove for the cord from the enlarger.

Next, drill a hole to receive the off-on switch. This hole should be countersunk so that the base of the off-on switch, when inserted, will be flush with bottom of board. Then to top side of board, screw, in correct position, the small foot-pedal, making sure that in aligning the pedal with the off-on switch that the rubber disk on the pedal comes in even contact with the tip of the switch (see bottom diagram on next page). Wire from the enlarger, held in groove by staples, is connected to terminals of the off-on switch. Six rubber-headed tacks will serve to support the setup.



CONSULT THIS and revealing diagrams (right) for the simple construction details.

HOW TO MAKE YOUR OFF-ON SWITCH



OLD TIME PHOTOG

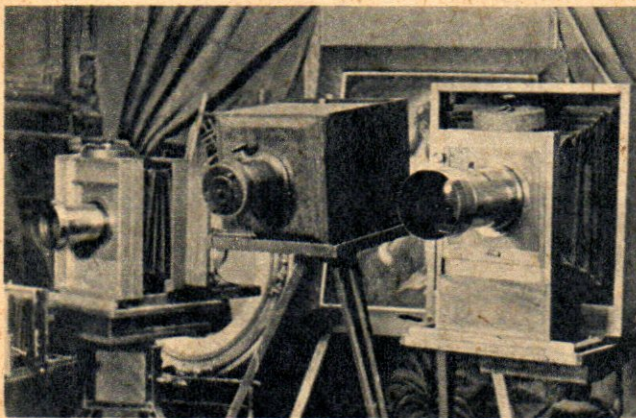
**He still takes pictures like
his father did—100 years ago**

THERE'S an old photo gallery in Jacksonville, Oregon, whose doors were first opened nearly a century ago. They're still open for business and the proprietor, Mr. Emil Britt, still takes pictures by the old methods he learned from his father close to a hundred years ago. The present owner, who inherited the now famous place, simply saw no reason for breaking away from the picture-taking ways of his dad, one of the early pioneers in tintypes daguerreotypes and wet plates.

That modern photography has never caught up with Mr. Britt is evidenced in the equipment still in use in the studio. All

of it was purchased from 1849 to 1875. Some of the cameras actually date from the old mining days of middle '80s when photographs were as fuzzy as the West was wild and wooly. They were recording images before the days of the automatic shutter, so exposures were made by removing the cap from the lens and timing the exposures by a watch.

This old time studio has become, in recent years, something of a mecca for tourists. Thousands of them, especially photography fans, visit the gallery each year to see the extensive collection of photographs and to marvel at their quality—some were made on porcelain and some on paper. Studio shelves loaded with hundreds of different chemicals is an especially interesting attraction. Because they made their own emulsions and albumen paper, Mr. Britt and his



PART OF EXTENSIVE collection of old time cameras owned and still used by Mr. Britt in his Jacksonville, Ore., studios. Cameras have no automatic shutters. Exposures are made by removing lens caps and timing by watch.



SHELVES ARE STOCKED with hundreds of chemicals. Britt and his father had to be well versed in chemistry because they made their own emulsions. Story of studio is told in Universal's "Picture Pioneer."

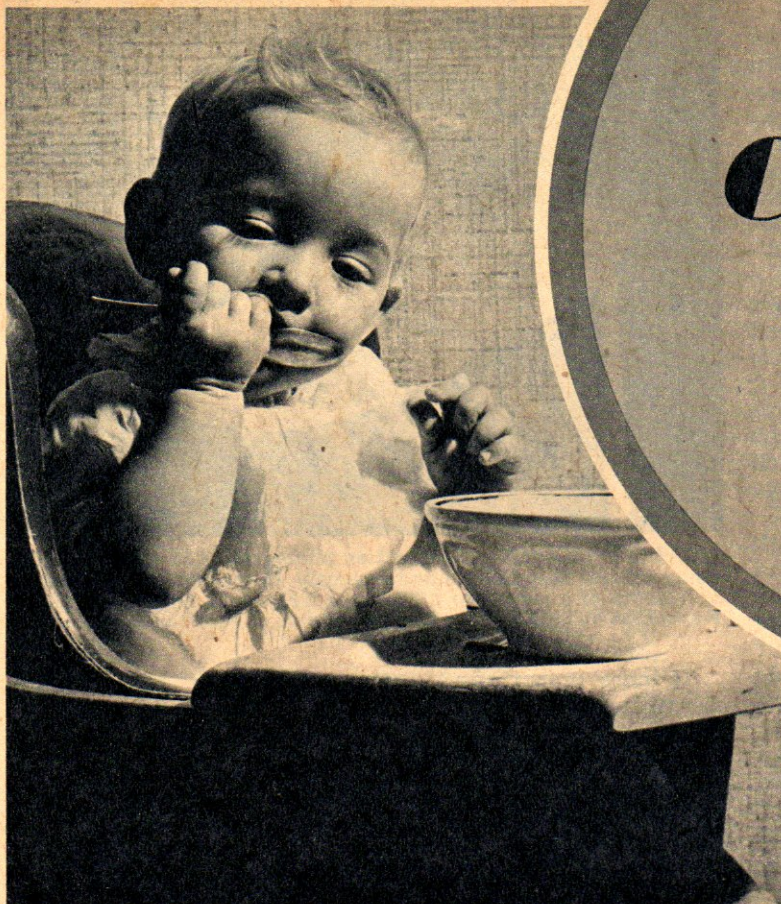


THIS CAMERA operated by Mr. Emil Britt is no johnny-come-lately. It was first used in Northwest Territory in 1852. Britt still makes good photographs with it but pictures require about 12 sec. exposures.

father had to be well versed in chemistry. The enlargements, which were made by reflecting the original picture in a mirror, were printed on paper-coated with whites of eggs and soda.

The visitor to the gallery will find that mountain, manor and other scenic backgrounds are still handy and, of course, very much in evidence, is the inevitable head holder to keep the subject steady while the picture is taken.

It's indeed a far cry from the picture pioneers of Britt's time to the photographers of today who have every modern convenience to aid them in taking good pictures.



Camera CUES

PICTURE (left) was taken with news-type camera and synchronized flash. Ed Hannigan used Press 40 bulb above and right of camera (1/50th, f/22, pan film).

Learn how to take single and multiple flash shots and get top quality pictures under practically any lighting conditions.

EQUIPMENT for single flash photography does not have to be elaborate or expensive. For the amateur who wishes only an occasional single-flash picture, the entire equipment, outside of a camera can consist of just a battery case (holding two flashlight cells) and a reflector. The old fashioned, but ever reliable "open shutter-shoot flash-close shutter" method, can be used with good results.

As the photographer becomes more advanced he can use any one of the flash synchronizers which are available at fairly reasonable prices. The simplest synchronizer is found on the box camera with flash attachment. Box cameras with flash permit hand held exposures, but can't produce pictures of fast action. Function of all synchronizers is to release the shutter at same time the bulb is fired.

Primary requisites for satisfactory results with flash photography are accurate determination of exposure, coupled with comparatively soft development of the negative. *Since exposure can be calculated by the guide number system on next two pages*, flash photography presents few problems to those who are going after just straight single flash pictures.

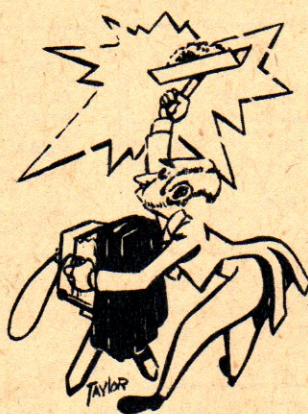
Where to place that one flash bulb and when to

use reflectors are problems of single flash photography which make the technique interesting. The

placement of the one bulb is the all-important factor which governs not only the quality of the resulting print but also the roundness, third dimensional qualities, composition and drama of the final result. The location of the one bulb and reflector should differ with individuals, with the number of objects in the picture and with the amount of dramatic effect desired. Each type of subject matter should be considered separately.

Flash portraits supply the single principles, variations and effects of single flash photography. For best results the flash bulb should be held above and to either side of

the camera. Although most synchronizers have the bulb on the camera, it should be removed and held over the lens, at arm's length at least. An extension cord of greater length will enable you to place the flash reflector above and to one side of the subject—as in natural ceiling light or sunlight. The flash bulb need not be held too far to one side to produce punch in single flash portraits. The flash exposure tables shown on next two pages list a number for every combination of film, shutter speed and bulb size. The photographer merely



ascertains from the chart the number for the particular film being used, the shutter speed desired and the size of the bulb being used. The guide number is divided by the distance in feet from the bulb to the subject. The resulting figure is the proper diaphragm opening or "f" stop. Note that the distance required is not the camera-to-subject, but rather the flash bulb-to-subject distance.

Determination of exposure with a single bulb must be solved for consistently good results. Flash charts are available for this use from bulb manufacturers.

Multiple flash photography—firing several flash bulbs simultaneously with the camera shutter—is a technique which brings quality lighting to action photography.

Equipment for effective results with multiple flash may be of the simplest and most inexpensive variety—an extension cord, with several outlets for standard photo-flood reflectors, plugged into your synchronizer socket will suffice. Most modern battery cases, however, are manufactured with outlets for additional reflectors. Be sure that all contact points are kept filed to reduce resistance and guarantee synchronization.



QUALITY LIGHTING with action photography is obtainable by using several flash bulbs simultaneously. In the above photo, made at 1/400th of a second at f/22, three large flash bulbs were used. Photograph by Dale Rooks is used by courtesy of the Milwaukee Journal.

If more than three bulbs are to be used, an extension permitting an extra pair of batteries will be required for your battery case. Change batteries frequently. If more portable equipment is desired, synchronizer manufacturers are marketing handy, clamp-on reflectors with fitted plugs for auxiliary lights.

FILM A

(West. Tungsten Rating 64)

Anso Superpan Press
Anso Triple "S" Ortho
Anso Triple "S" Pan
Anso Ultra Speed Pan
Defender Arrow Pan
Defender Arrow Pan Press
DuPont Superior Pan 3
Eastman Ortho X
Eastman Super-Panchro Press
Eastman Super XX
Eastman Tri-X Pan

FILM B

(West. Tungsten Rating 32)

Anso Isopan
Anso Plenachrome
Anso Superpan Supreme
Anso Super Plenachrome
Anso Super Plena. Press
Anso S.S. Pan
Defender X.F. Pan
DuPont Superior Pan 2
Eastman Plus X
Eastman S.S. Pan
Eastman Verichrome

FILM C

(West. Tungsten Rating 16)

Anso F.G. Rev. Superpan
Anso S.S. Plenachrome
Defender F.G. Pan
Defender X.F. Ortho Press
DuPont Superior Pan 1
Eastman Ortho Press
Eastman Panatomic X
Eastman Panchro Press
Gevaert Panchromosa
Kodak Panatomic
Kodak Panatomic X

FOCAL PLANE USE

Minicameras having the focal plane type of shutter should be used with the Press 40, Press 50, No. 2 or No. 2A sizes at speeds no slower than 1/200th of a second. The No. 2A is especially recommended for use where negatives show non-uniformity of exposure with smaller size bulbs.

SUPERFLASH BULB SIZE	FILM SPEED	1/50 Sec.	1/100 Sec.	1/200 Sec.	This Column FOCAL PLANE ONLY
No. 0 or Press 25 in regular type reflector	Film A	#200	#140	#100	1/200 Sec.
	Film B	#140	#100	#65	
	Film C	#100	#65	—	
Press 40 or Press 25 in directed-flash reflector	Film A	#340	#230	#160	PRESS 40
	Film B	#230	#160	#110	
	Film C	#160	#110	#80	
Press 50	Film A	#380	#270	#190	PRESS 50
	Film B	#270	#190	#130	
	Film C	#190	#130	#95	
No. 2	Film A	#450	#320	#230	No. 2
	Film B	#320	#230	#160	
	Film C	#230	#160	#120	
No. 3	Film A	#560	#400	#280	No. 2A
	Film B	#400	#280	#200	
	Film C	#280	#200	#140	

DIRECTIONS FOR USE

1. Check your film against list below to find A, B or C film speed.
2. Refer to table on Superflash size you use to get your Flash Number at shutter speed you use.
3. Divide the Flash Number by the distance in feet from lamp to subject to get the f stop.

Example—If you use Anso Superman Supreme or Eastman Plus X with Superflash Press 40 and want to shoot at 1/100th of a second at a subject 10 feet away. Checking the film list you find these films are B films. Checking the Press 40 table at 1/100th of a second you find your Flash Number is 160. Dividing 160 by 10 (distance in feet) your lens opening is f16. Flood tables are figured the same way.

Exposure with multiple flash as with single bulb photography, can be accurately determined by using the "guide number" system. Three rules apply to exposure determining for multiple flash: (1) If one bulb is the main light source (being closest to the subject), the exposure is calculated as if it were the only light used. Refer to guide number chart. (2) If several bulbs are placed next to each other and all are directed toward the subject, divide the time of exposure for one bulb by the total number of bulbs being used, or, stop down an additional number for each two. (3) If multiple lights are placed to cover a large area and each is approximately the same distance from a section of the subject, calculate the exposure on the basis of any one section. Distance of one bulb from its section is the exposure-determining factor.

BALANCE LIGHT SOURCE

As with any other kind of light source, balance must be obtained with flash. If one balances his lightings

by having at least one bulb at or very near the camera, his lighting problems will be lessened. If the camera bulb is to be a balancing secondary light, then it, obviously, must be at a greater distance from the subject than the main light source (provided both are the same size). If the fill-in bulb (camera light) is too close, flat lighting results; if the fill-in bulb is too far from the subject, excessive contrast results. Experience will eventually teach you how to balance your lights correctly. Meanwhile, keep one bulb at the camera.

To combine flash with other kinds of light, use the "open-shutter" method. Leave shutter open long enough to expose the other light source, then flash the bulbs. Multiple flash to eliminate retouching is a second use. For duplicating normal lighting and for group lighting are other uses.

FILM SPEED {		Weston	4	8	16	32	64
		G-E	6	12	24	48	100
PHOTO-Lamp	MAZDA	KB	KA				
	FLASH						
No. 11	Time, Bulb, 1/25, 1/50	70	100	140	200	280	
	1/100	55	78	110	155	220	
	1/200, 1/250	44	60	88	120	175	
	1/400, 1/500	30	41	60	88	120	
No. 16A	Time, Bulb, 1/25, 1/50	80	113	160	225	320	
	1/100	62	88	125	175	250	
	1/200, 1/250	50	70	100	140	200	
	1/400, 1/500	35	50	70	100	140	
No. 21	Time, Bulb, 1/25, 1/50	85	120	170	240	340	
	1/100	65	92	130	185	260	
	1/200, 1/250	55	75	110	150	220	
	1/400, 1/500	38	55	75	110	150	
No. 50	Time, Bulb, 1/25	135	190	270	380	540	
	1/50	115	160	230	320	460	
No. 31	1/200, 1/250	33	48	66	96	130	
	1/400, 1/500	24	33	48	66	96	
	1/1000	17	24	33	48	66	

This table for SM, No. 5 and No. 6 lamps is based on the use of reflectors designed for flash with midget lamps.

FLASH EXPOSURE TABLES

No. 21	Time, Bulb, 1/25, 1/50	110	155	220	310	440
	1/100	85	120	170	240	340
	1/200, 1/250	70	100	140	200	280
	1/400, 1/500	50	70	100	140	200
No. 50	Time, Bulb, 1/25	175	250	350	500	700
	1/50	150	210	300	420	600
No. 31	1/200, 1/250	44	60	88	120	175
	1/400, 1/500	30	44	60	88	120
	1/1000	22	30	44	60	88

This table (above) for lamps No. 21, 50, 31 is based on use of studio-type reflectors designed for larger size lamps.

SM	Time, Bulb, 1/25, 1/50, 1/100	30	42	60	84	120
	1/200, 1/250	24	34	43	68	96
	1/400, 1/500	19	27	38	54	76
No. 5	Time, Bulb, 1/25, 1/50	70	100	140	200	280
	1/100	55	78	110	155	220
	1/200, 1/250	44	60	88	120	175
	1/400, 1/500	30	44	60	88	120
No. 6	1/100	33	48	66	96	130
	1/200, 1/250	24	33	48	66	96
	1/400, 1/500	17	24	33	48	66
	1/1000	12	17	24	33	48

This table for lamps No. 11, 16A, 21, 50, 31 is based on use of average reflectors with synchronizer attachments.



BARNYARD SHOTS

**TAKE A CAMERA DOWN TO THE FARM AND
SHOOT YOUR FAVORITE ANIMALS**



JUST A REMINDER that animal subjects should never face the sun. They don't like it. Keep an eye out for amusing shots like this. When you see one shoot fast. Wait for the picture you want. It will come.

If you expect to go anywhere near a farm this summer, don't make the mistake of not taking your camera with you. Here's why: On most every farm, there's a barn, and in a barn, or certainly near one, there's likely to be some of the best animal characters that ever made a honey of a picture. Just to give you an idea of what wonderful subjects cows, horses, hogs and even goats and sheep can make, take a look at these pictures. They were taken by Tet Borsig. He's a professional, of course, but he's willing to bet that anyone can take pictures as good if they follow a few simple rules. The first and most important is: "Love animals, and knowing how to best photograph them will come easy." Here are some other things to remember:



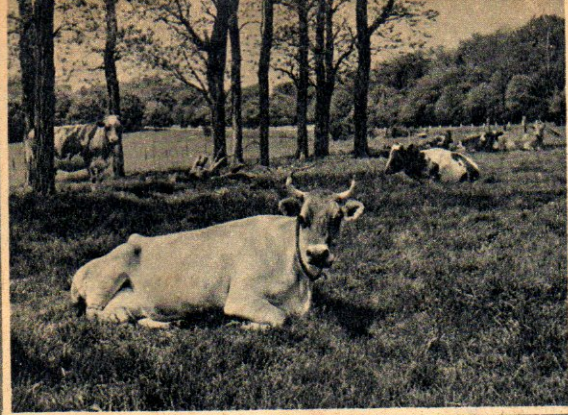
HORSES ARE PROBABLY the most handsome of barnyard animals. When they're photographed running they make an especially good picture. Note tremendous depth of focus. Tet Borsig shot in 1/200th to stop action.



SHOOT ANIMALS when they're eating or drinking. Make sure not to walk between young and their mothers. "Mom" can make things unpleasant.

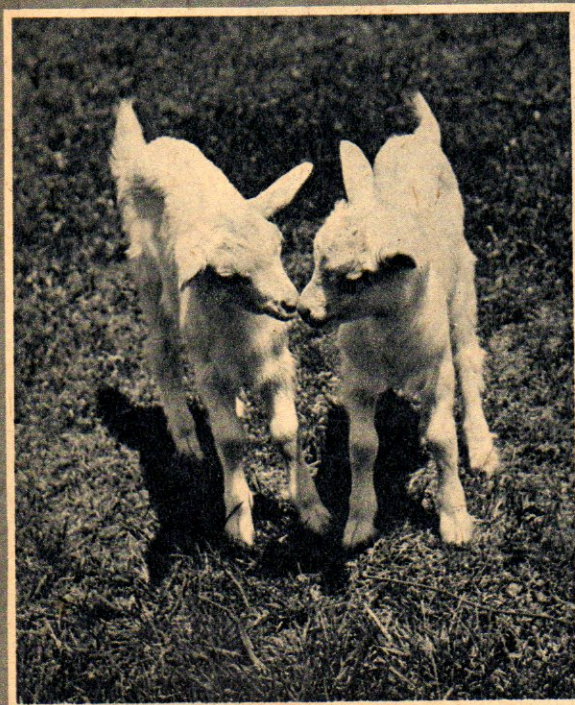


SHEEP are difficult to photograph. They will scoot away at any disturbance. Avoid unnecessary fuss when shooting. Be quiet and shoot quickly.



ALL BARNYARD ANIMALS are photogenic, but all are not easy to shoot. A cow is no trouble because she isn't easily disturbed. But let animals get used to seeing you around before using your camera.

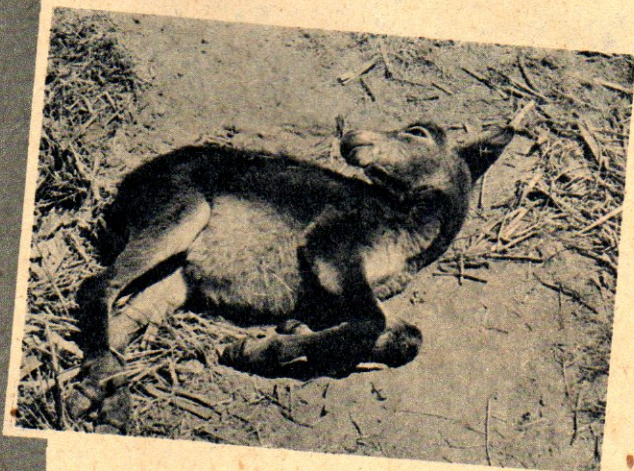
1. Shoot only on sunny days. 2. Get acquainted with your subjects. Go out to the barn; walk in the fields. Study the animals before you think about taking their pictures. 3. When you have lined up your picture, shoot quickly. Too much fuss will scare away most animals. 4. Best background for smaller animals can be gotten by shooting down—a high angle shot. Larger animals such as horses and cows should be taken from a low angle—while crouched or on the knees. 5. Have someone work with you, if only to help shove a cow into a better shooting position. 6. Never force the animal to face the sun. It may get "onry" on you and refuse to cooperate. 7. Above all, have patience. The picture you want will come in time.



GOATS ARE GENERALLY no problem and they make good subjects. But as in all barnyard shooting, first study your subjects, pick a place to shoot from, walk to the spot, and snap your shutter.



THIS MEETING OF THREE "oinkers" was taken by shooting through the fence which enclose their pen. Pigs, like cows, are not camera shy. They don't scare easily and they "stay put" while being photographed.



TAKE PICTURES of animals shortly after they're born. Don't wait until the following day because in only a few hours after birth, new born, like this colt, are running around like mad

THIS FINE PICTURE is just a sample of the many beautiful backgrounds found on a farm. Shoot fast enough to stop any movement but with as small an aperture opening as possible to insure depth of focus.



Everybody's Movie Course

A new "how-to-do" book on amateur
Motion Picture Photography

This is the book U. S. Camera fans have been clamoring for. Now published in handy pocket size, this comprehensive manual is the outgrowth of the 20 simple, practical lessons in movie-making serialized in U. S. Camera Magazine.

Here are some of the chapter headings:

- Lesson 2: Choosing a Camera
- Lesson 5: Lighting
- Lesson 6: Exposure
- Lesson 10: Editing
- Lesson 11: Titling
- Lesson 12: Color
- Lesson 16: Sound

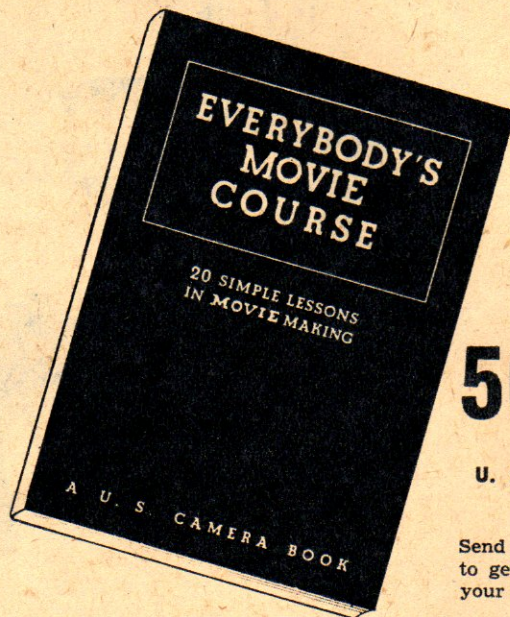
Everybody's Photo Course REVISED—ENLARGED

A new big edition—20 basic chapters for the new photographer. All you need to know about taking pictures and processing films. Send for this new big edition of the sell-out book "Everybody's Photo Course"!

What the Beginner Wants to Know
All in this complete new Manual

PARTIAL LIST OF CONTENTS

- | | |
|---------------------------------------|---------------------------------|
| 1. How to Hold and Operate a Camera | 9. How to Make Contact Prints |
| 2. How to Determine Shutter Speed | 10. Dodging Techniques |
| 3. How to Regulate Exposure Time | 11. How to Finish Prints |
| 4. Effect of Exposure on the Negative | 12. How to Letter Prints |
| 5. Tank Developing of Roll Films | 13. Glossary; Darkroom Formulas |
| 6. Selecting Proper Print Paper | 14. Types of Lighting |
| 7. The Enlarger and How It Works | 15. Outdoor Lighting |
| 8. Making Enlargements | 16. Tungsten Lighting |
| | 17. Photoflood Lighting |
| | 18. Single Flash Technique |
| | 19. Multiple Flash Technique |
| | 20. Composition |

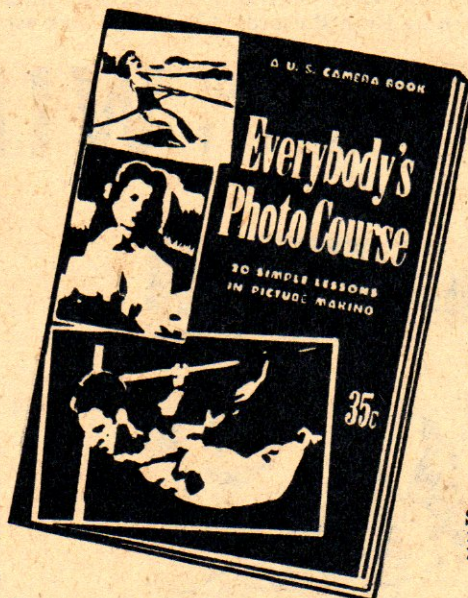


50c

A
U. S. CAMERA
BOOK

Send coupon below
to get this book at
your camera store.

Over 85 photographs and diagrams. 112 pages
in two-color paper cover. 50,000 copies letter-
press printed on coated stock. Price 50c



35c

A
U. S. CAMERA
BOOK

Send coupon below
to get this book at
your camera store.

U. S. CAMERA PUBLISHING CORP.
420 Lexington Avenue,
New York 17, N. Y.

I enclose \$..... to cover books checked
below. In N. Y. C. add 1% city sales tax.

.....copies, EVERYBODY'S PHOTO
COURSE, paper.....35 cents
.....copies, EVERYBODY'S MOVIE
COURSE, paper.....50 cents

Name.....

Address.....

City.....Zone....State....



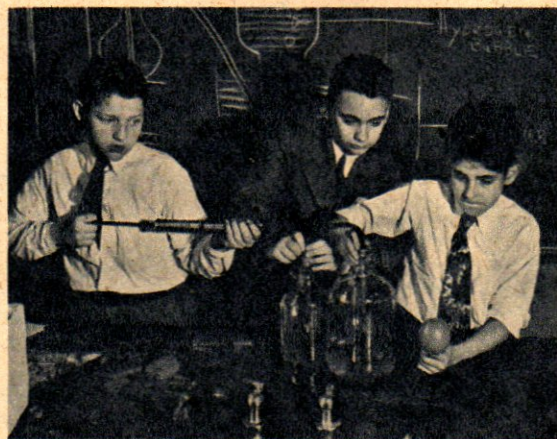
GRAND PRIZE WINNER in National High School Photo Contest. Picture was taken by Evan Richards, 17-year old high school student from Schenectady, N. Y.

HIGH SCHOOL CONTEST **WINNERS**

Thousands of shots were entered in the National High School Photo Awards. Here are some of the best



THIS PICTURE, taken by Clarice Davis of Schenectady, N. Y., copped \$30 prize. She was Johnny-on-the-spot to get this shot.



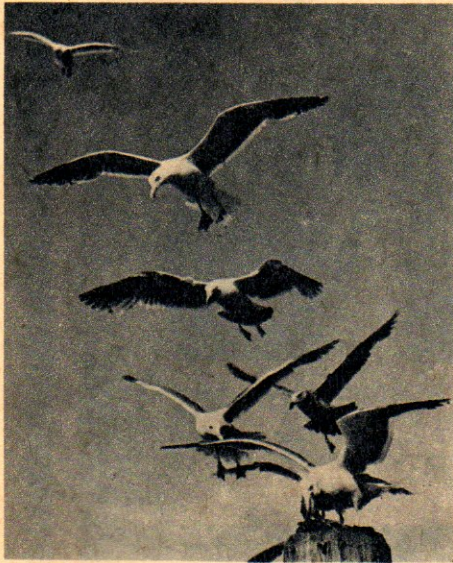
JUDGES AWARDED a 1st prize of \$100 to Norman H. Lehrer of N. Y. C. for this chemistry lab shot. Note the "what's gonna happen" expressions.



CLOSEUPS like this are tough to photograph. But V. Keith Simms of Roanoke, Va., managed it.—a 2nd prize.



TWO YOUNG MISSES on the avenue proved prize-winning subject material for Gerald Piacentino of N. Y. C.



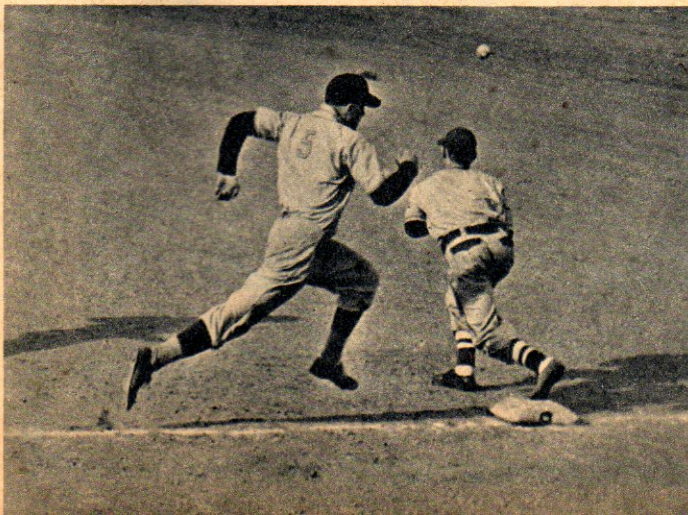
WAYNE K. SAIGET of Los Angeles, Calif. entered this well-handled shot in the Recreation class. It was awarded \$50 prize.

THIS year's competition for the \$3,000 National High School Photographic Awards was never so keen. Thousands of snapshots were received from youngsters in every state. The pictures ranged from snaps of "the kid sister" to dramatic action shots taken at Public Works projects; from a closeup view of the moon to equally dazzling closeups of the girlfriend; track and football stars outpulled classroom scenes and flash illumination proved a more popular method of taking indoor pictures than flood lamps. But the wide diversity of subject matter was not the only factor which made the job of picking winners anything but easy. The judges' job was made doubly difficult by the extremely high quality of the snapshots submitted. Only after long and careful consideration was lavished on every entry were selections finally made. The Grand Prize winner: Evan Richards, student at Nott Terrace H. S., Schenectady, N. Y. His snapshot (top of preceding page) was voted \$500 prize by Board of Judges.

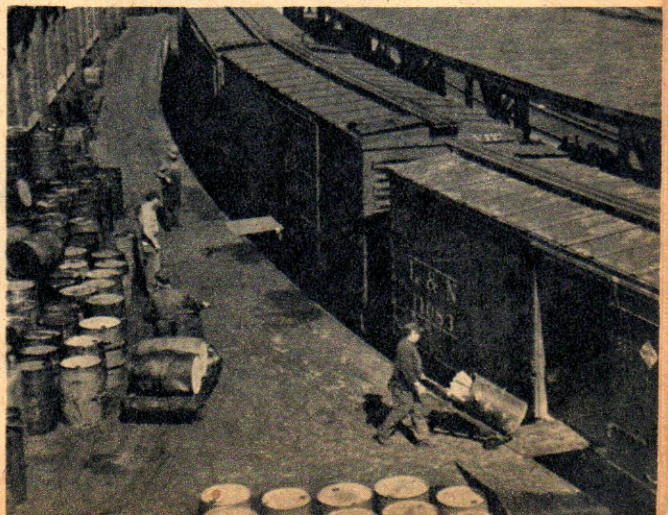


THIS SIMPLE approach to glamour scored with judges who awarded 2nd prize to Jeanine Stiles of Los Angeles, Calif.

ONE OF THESE PRIZE pictures entered in the Sports Class. It won \$30 for Wes Cameron of Spokane, Wash.



OCCUPATIONS CLASS included such fine entries as this winner taken by Henry G. Rascoe of Harmon, N. Y.



NEW IDEAS

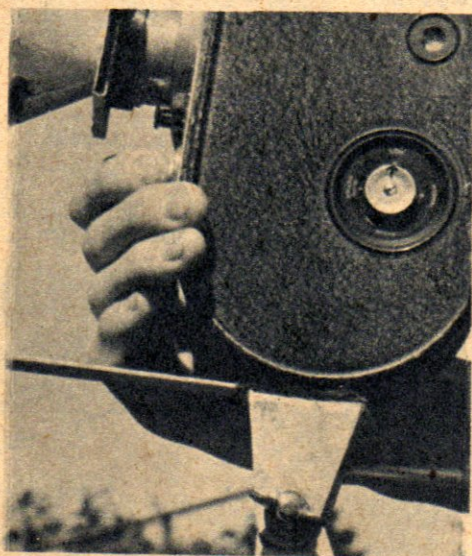
Here are some handy photo hints for every picture-taker



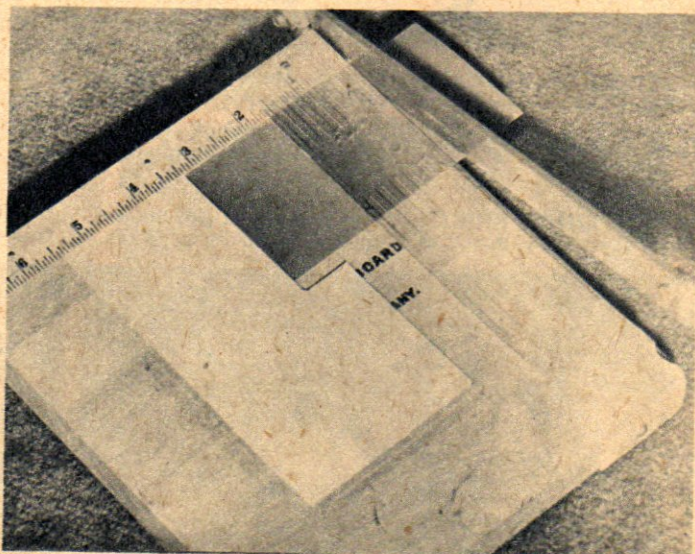
TO SOAK UP MOISTURE from prints while ferrotyping them use a double thickness of newspapers. Those who have been using blotting paper for this purpose will find that newspapers are just as satisfactory and, of course, a great deal cheaper.



WHEN WOODEN tripods fail to work smoothly, give them a thorough going over with any available variety of floor wax. They will then operate with ease.



MOVIE CAMERAS with slow speed attachments can be used to create trick effects by stop motion. Give camera a quick jab for single frame exposures.



THIS JIG WAS MADE to cut accurately 5x7 sheet film into $2\frac{1}{4} \times 3\frac{1}{4}$ sizes. First position is used to make cut resulting in strips $2\frac{1}{4}$ " wide. The second position gives a cut that trims strips to $3\frac{1}{4}$ ". Cardboard jib may be fastened in place permanently.

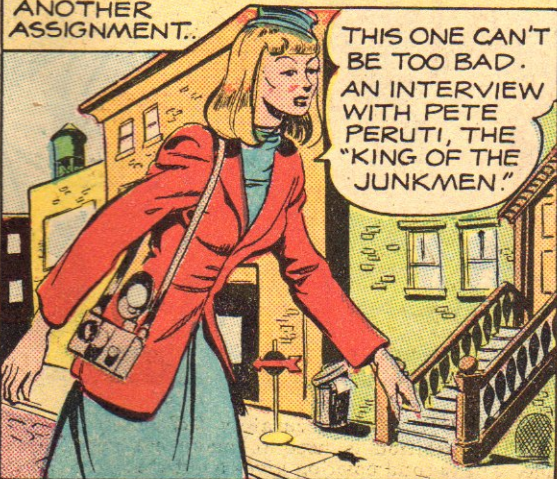
LINDA LENS

LINDA LENS IS A VERY KEEN GAL WITH A CAMERA, AND SHE DOESN'T DO SO BADLY WHEN IT COMES TO DETECTIVE WORK EITHER. AN UNSOLVED MURDER ISN'T ANY PUZZLE FOR LINDA, WHEN SHE GETS TO WORK ON IT!



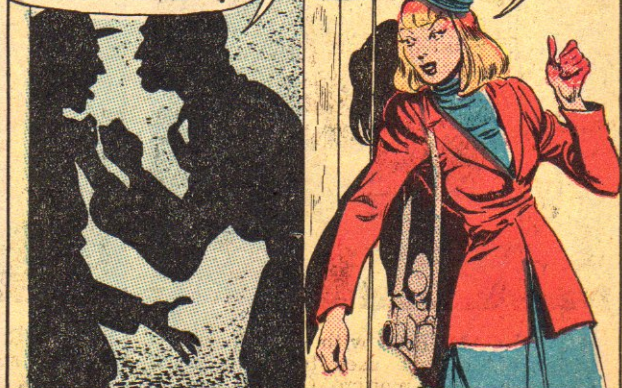
THERE GOES LINDA AGAIN... OFF ON ANOTHER ASSIGNMENT.

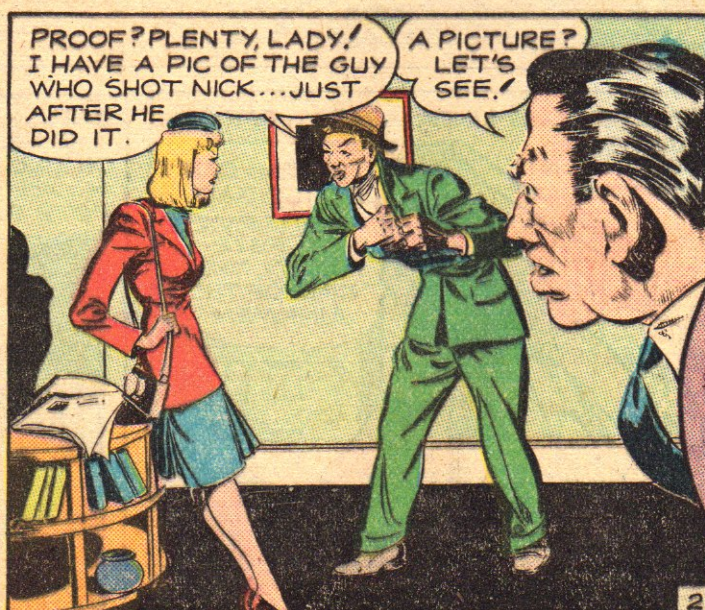
THIS ONE CAN'T BE TOO BAD. AN INTERVIEW WITH PETE PERUTI, THE "KING OF THE JUNKMEN."



BARNEY IF YOU KNOW WHO KILLED NICK, TALK! OR I'LL BASH YOUR HEAD IN... AS SLIRE AS MY NAME'S PETE PERUTI!

HERE I BE.... AND IT SEEMS THAT MY BOY IS IN!







YEAH! THIS IS IT!
NICK ON THE FLOOR
AND THE KILLER
STANDING OVER HIM
WITH A
GAT IN
HIS PAW!

SURE! AN' DO
YOU RECOGNIZE
THE KILLER?



RECOGNIZE HIM? ARE YOU
KIDDIN'? IT'S MY COUSIN CHARLIE
MARTINA. SURE I RECOGNIZE
THE RAT. HE'LL PAY FOR THIS!!



HUH! THIS TELLS THE STORY!
BY THE WAY, YOUR DEAR
COUSIN CHARLIE
IS WEARING A
WEDDING RING.

YEAH...HE MARRIED
AFTER NICK WAS
BUMPED
OFF. NOW
GO HOME
GIRLIE, NO
INTERVIEW
TODAY...



PETE..WHAT'RE
YOU GOIN'
TO DO?

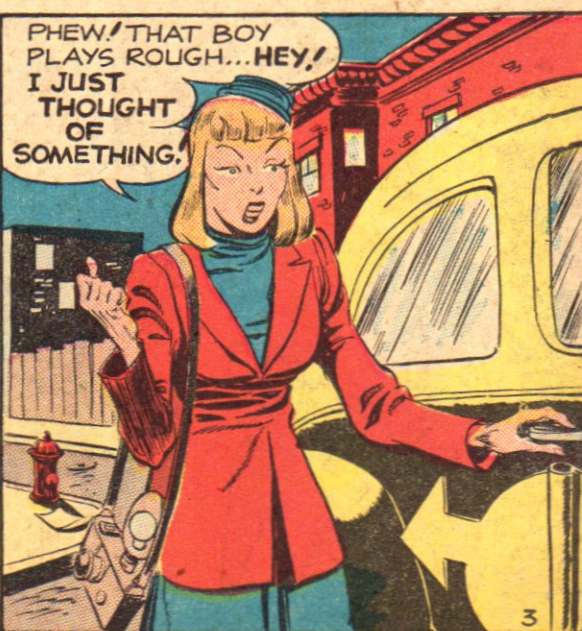
YEAH.
TAKE OFF,
GIRLIE.

I..UH...
UNDERSTAND,
I'LL BE SEEING
YOU.

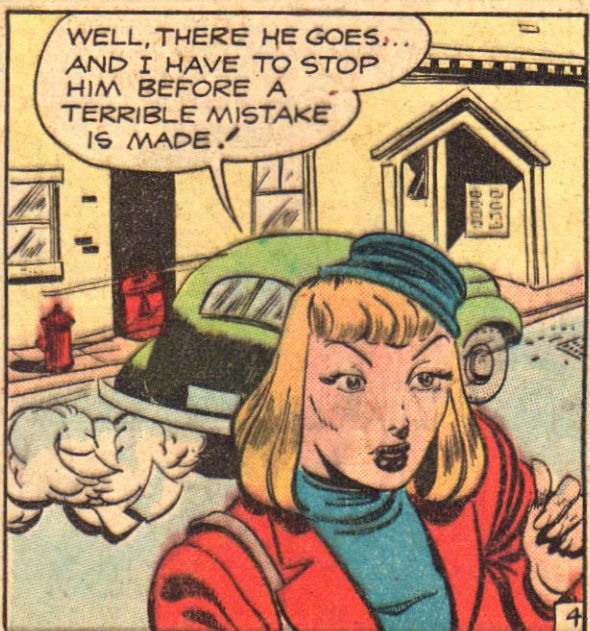
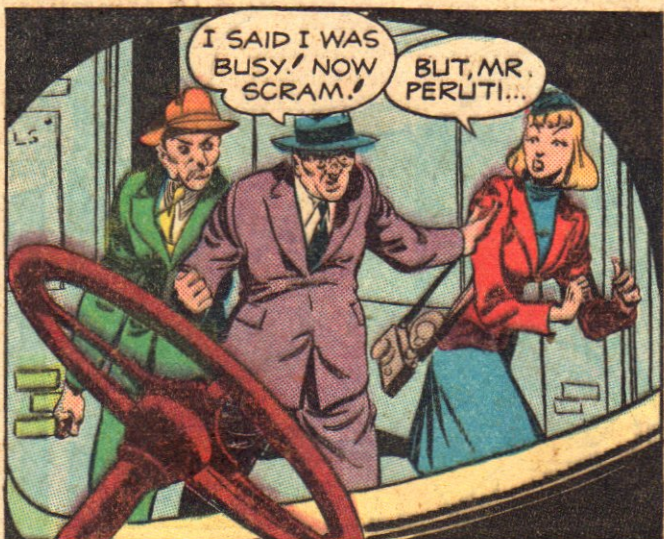
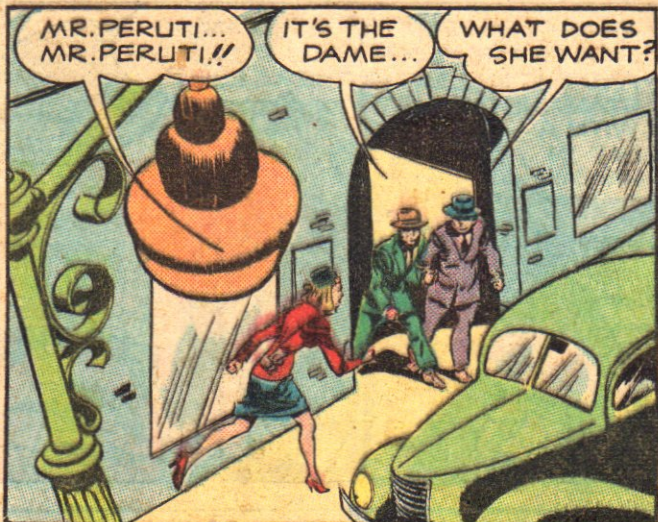


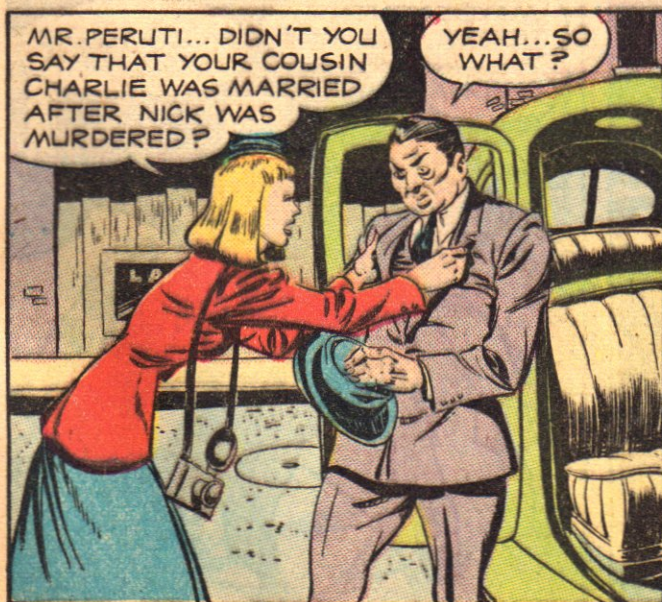
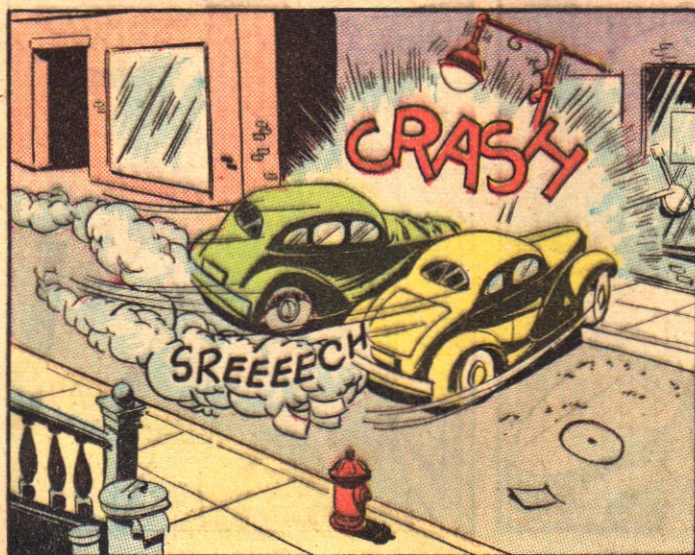
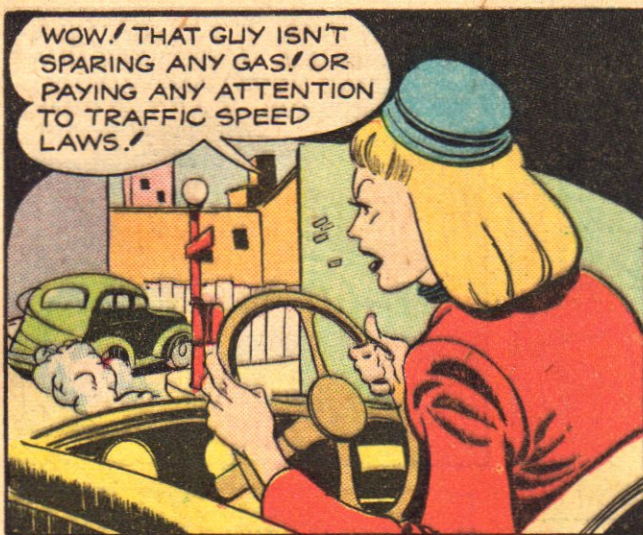
DO? I'M GETTIN'
READY FOR SOME
RAT HUNTIN'
IS ALL.

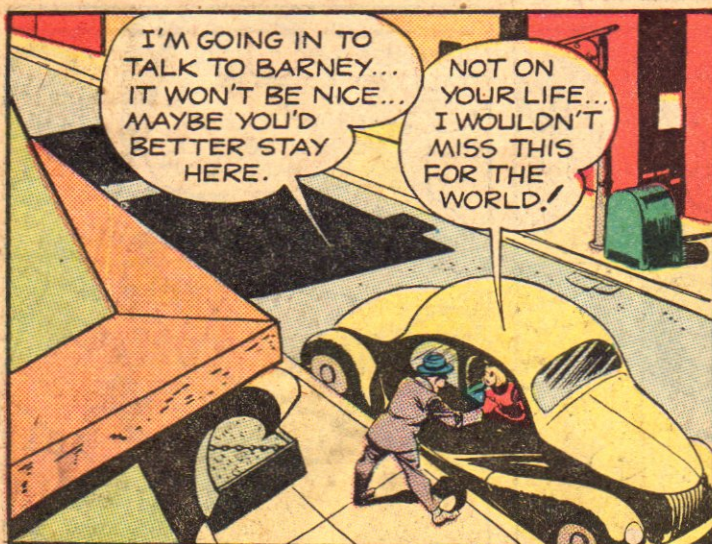
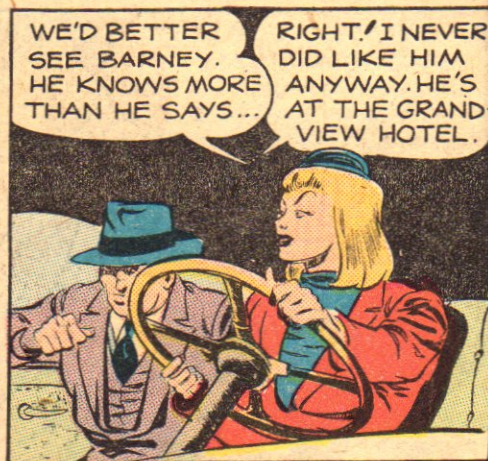
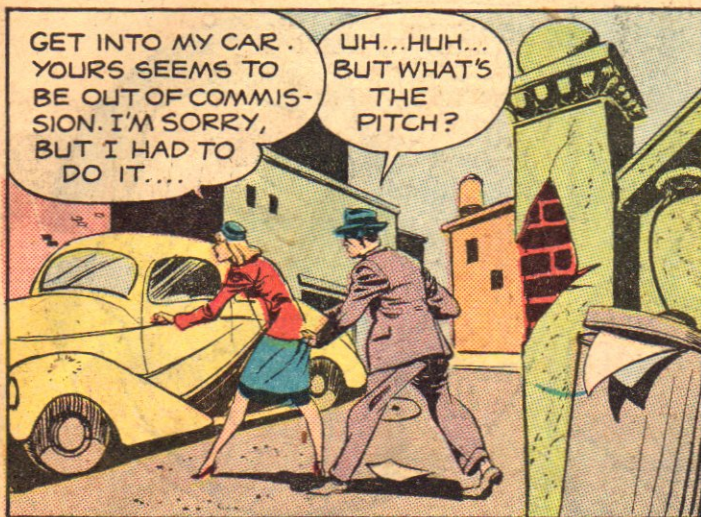
I GET YA. CHARLIE
MARTINA IS GOIN' TO
TO BE CHEWIN' LEAD,
HUH? HE DESERVES
IT.



PHEW! THAT BOY
PLAYS ROUGH...HEY!
I JUST
THOUGHT
OF
SOMETHING.

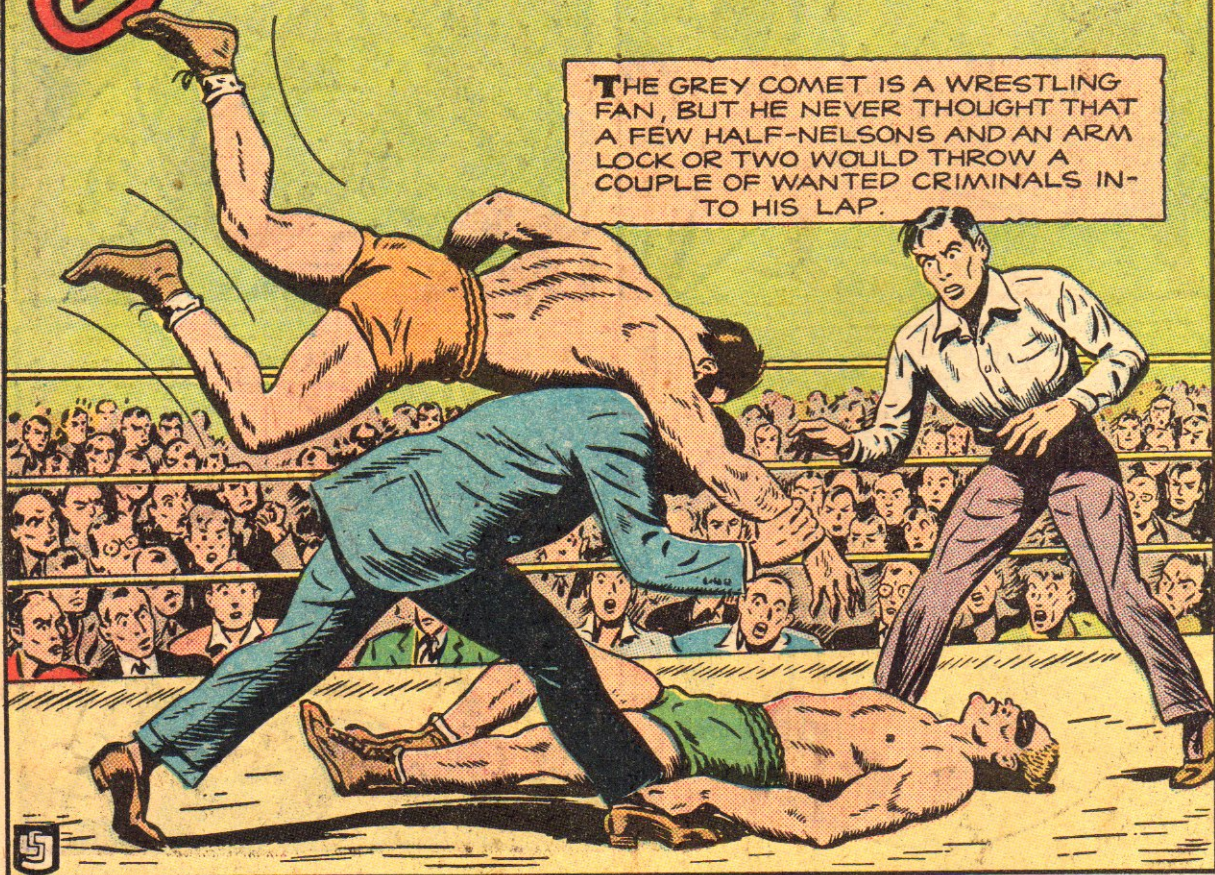






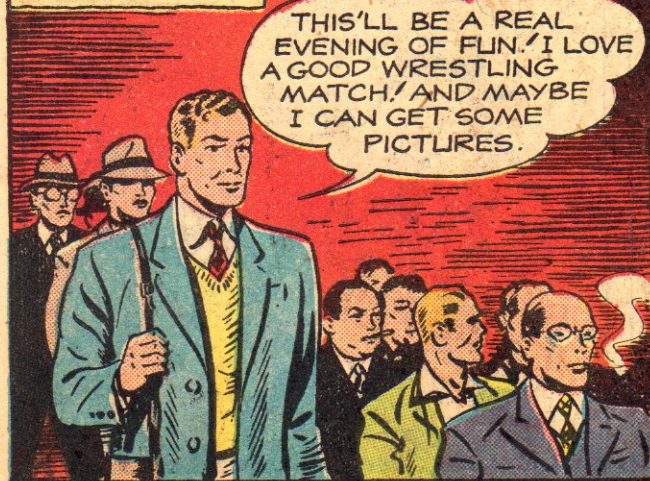
THE GREY COMET

THE GREY COMET IS A WRESTLING FAN, BUT HE NEVER THOUGHT THAT A FEW HALF-NELSONS AND AN ARM LOCK OR TWO WOULD THROW A COUPLE OF WANTED CRIMINALS INTO HIS LAP.

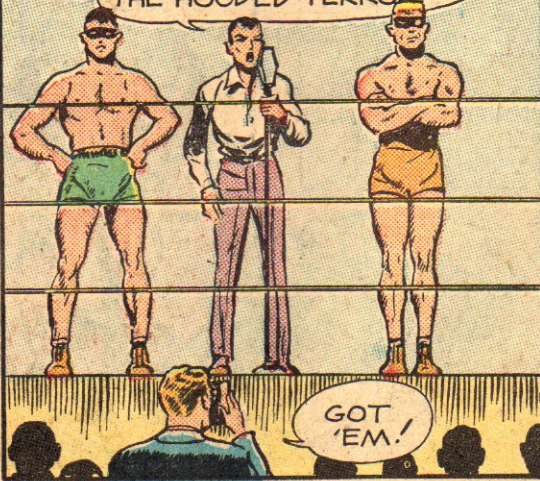


OUT FOR AN EVENING'S RELAXATION, THE GREY COMET IS AT THE WRESTLING MATCHES.....

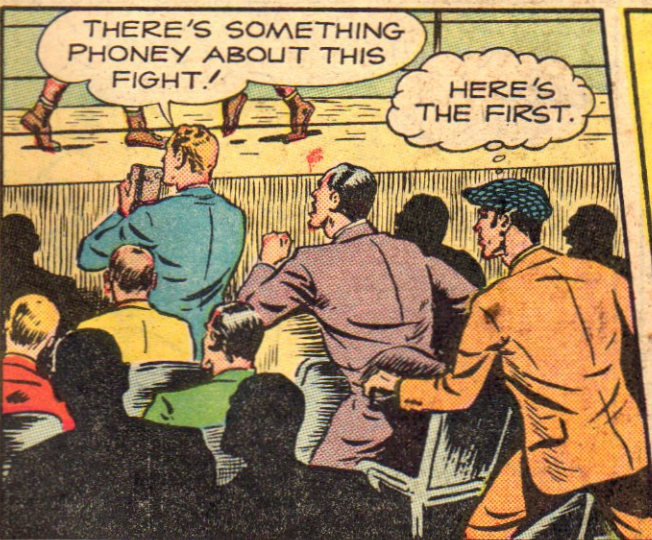
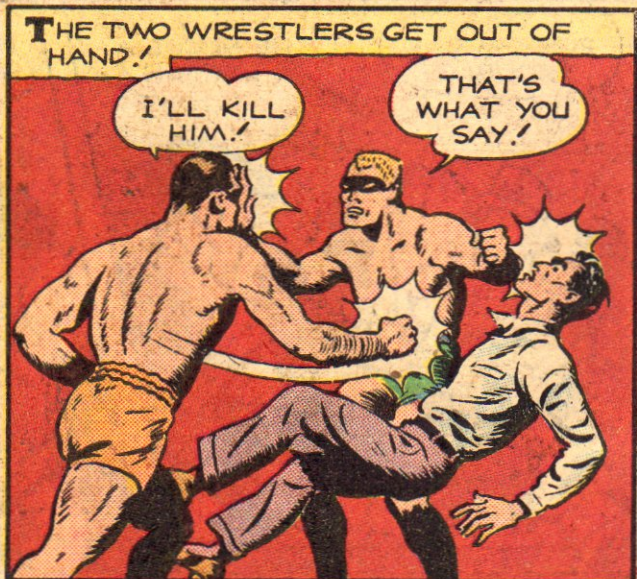
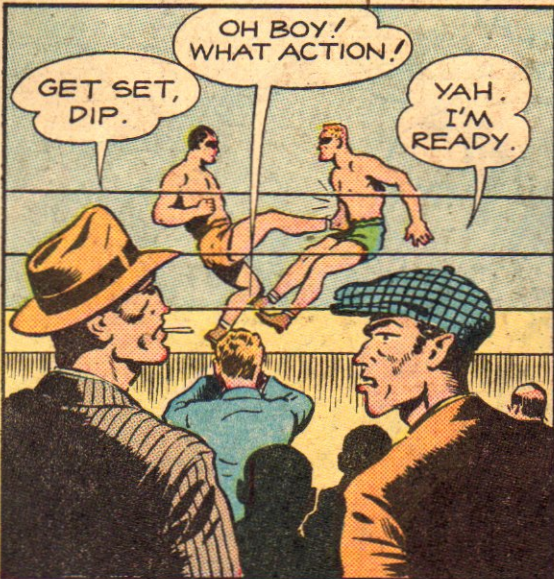
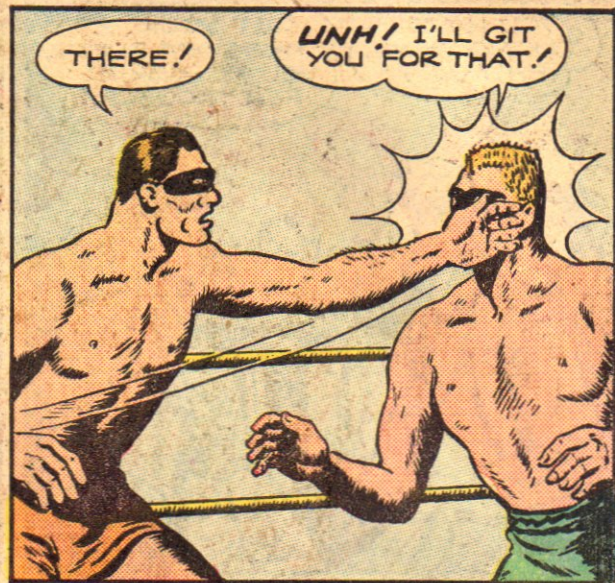
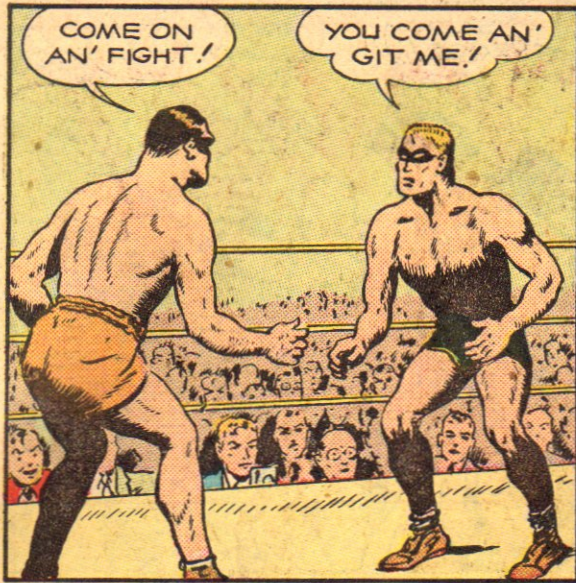
THIS'LL BE A REAL EVENING OF FUN. I LOVE A GOOD WRESTLING MATCH, AND MAYBE I CAN GET SOME PICTURES.



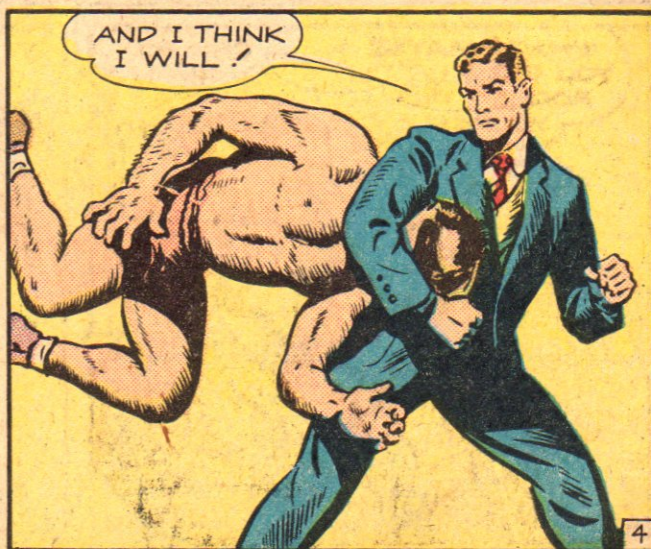
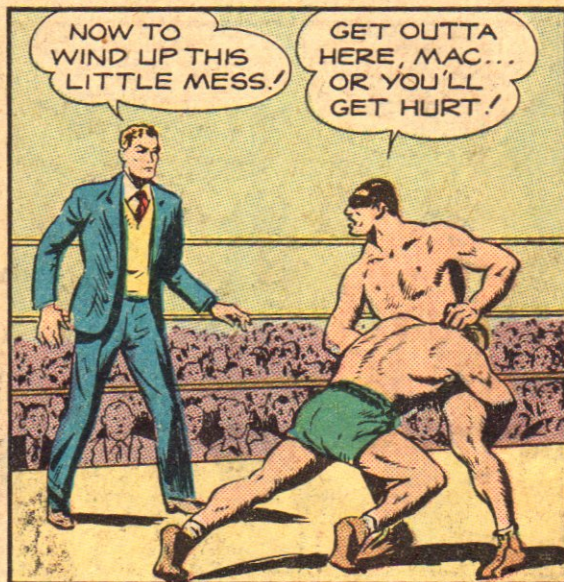
THE MAIN EVENT... BETWEEN THE MASKED MARVELS..... EL GRECO, THE GREEK... AND THE HOODED TERROR!

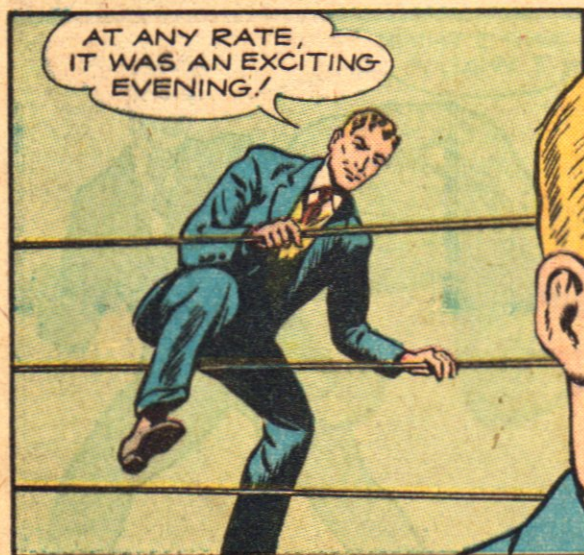
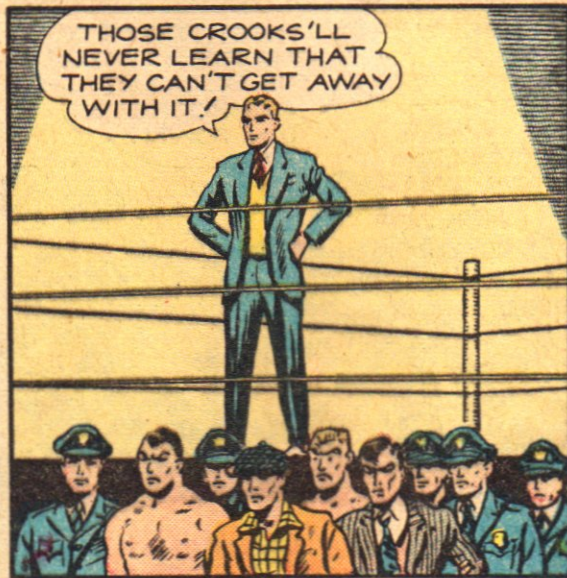
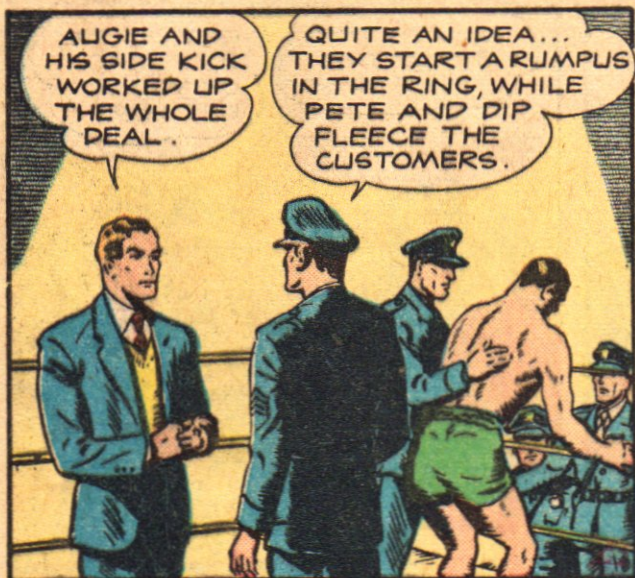
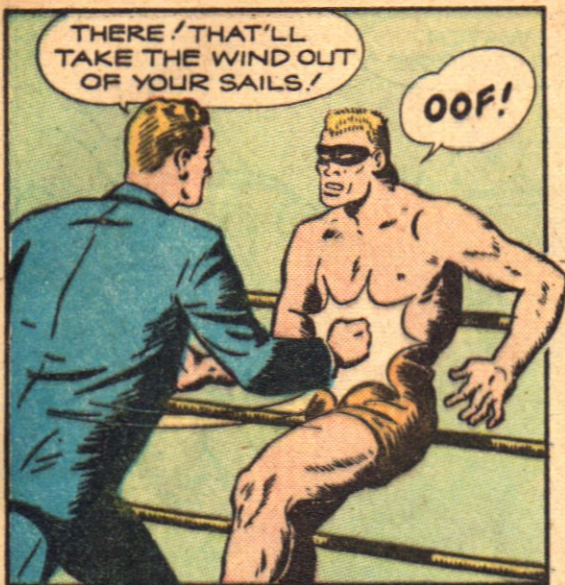


GOT 'EM!

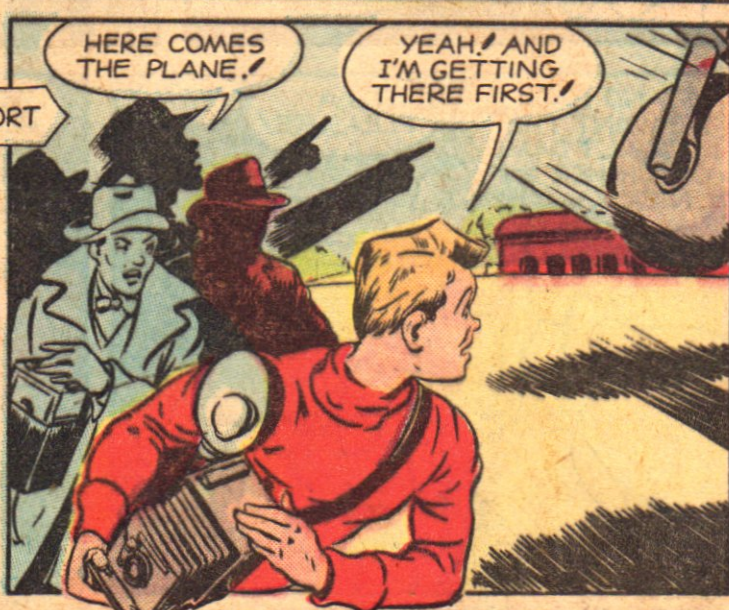


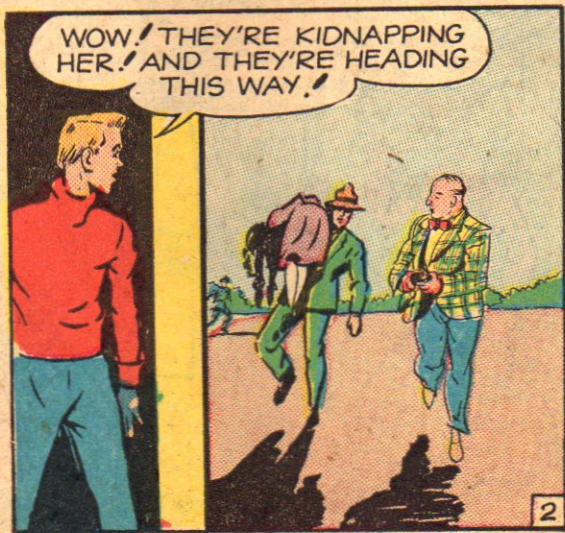
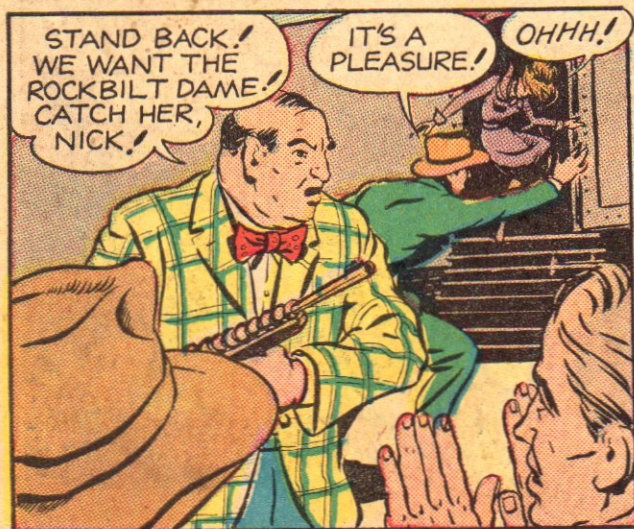
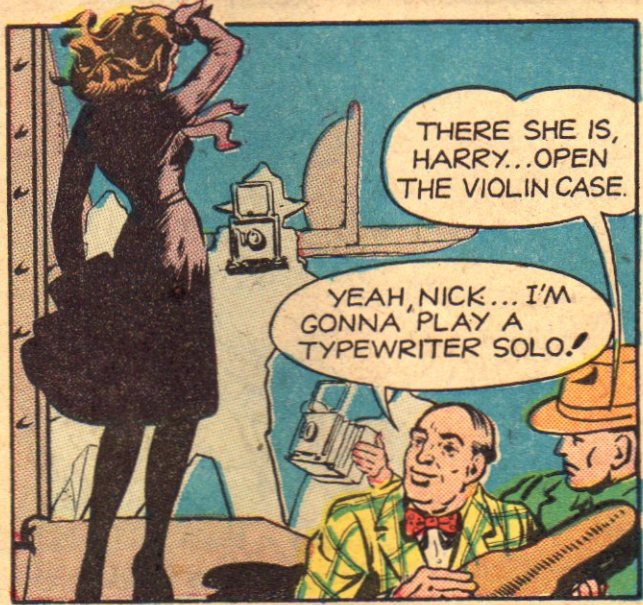
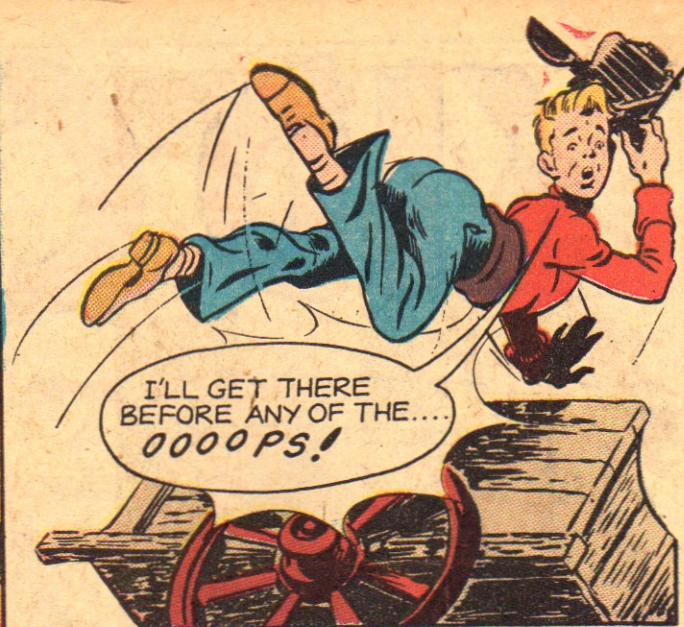
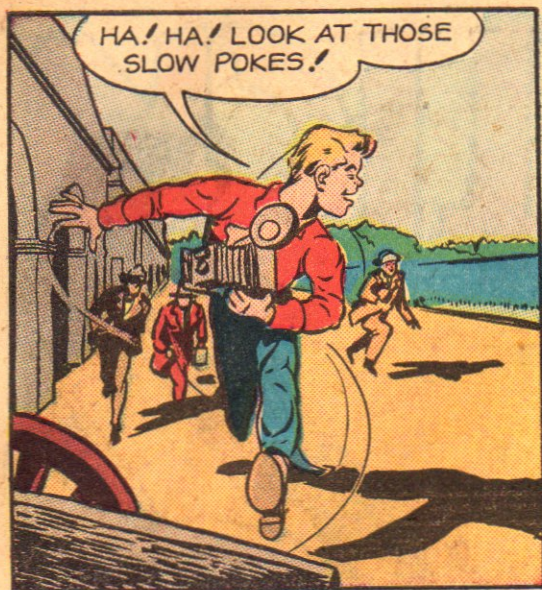


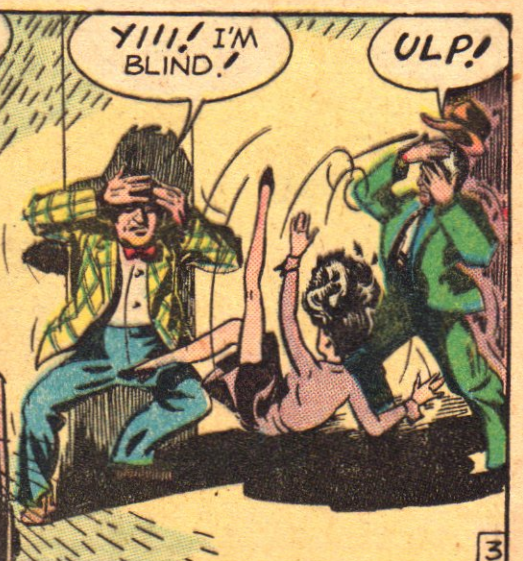
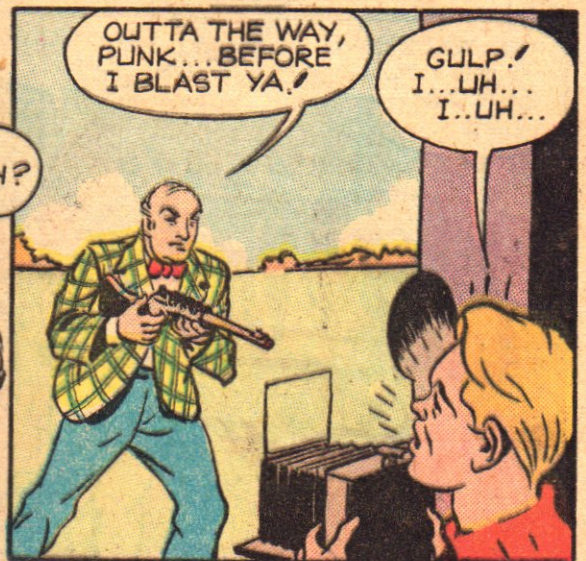
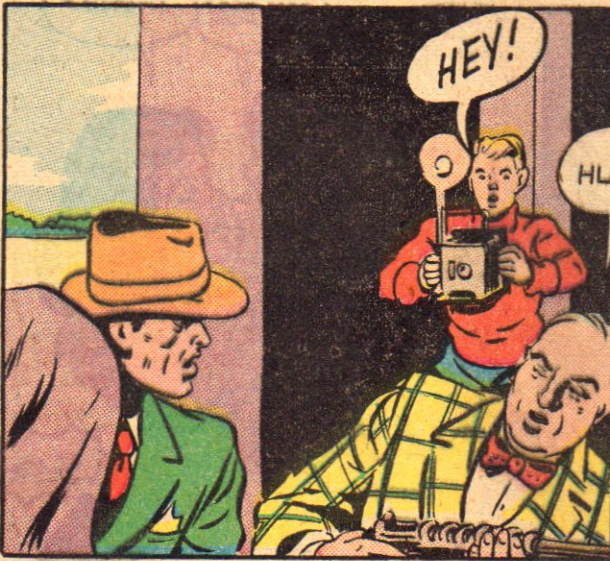
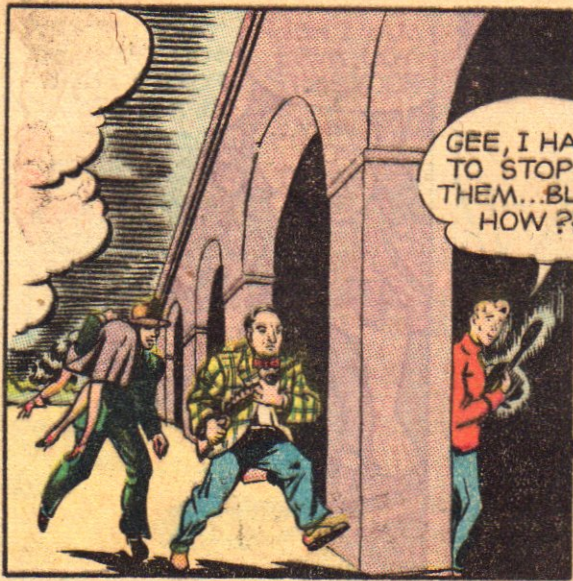


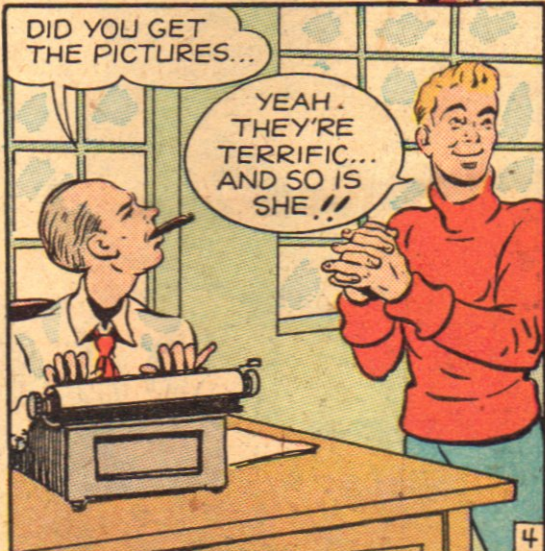
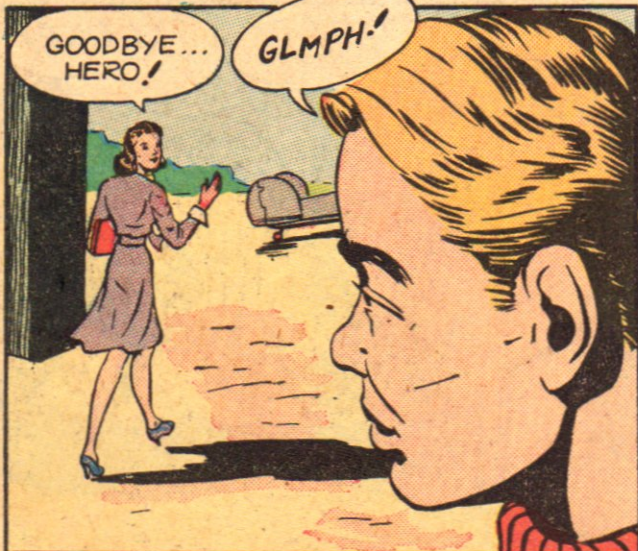
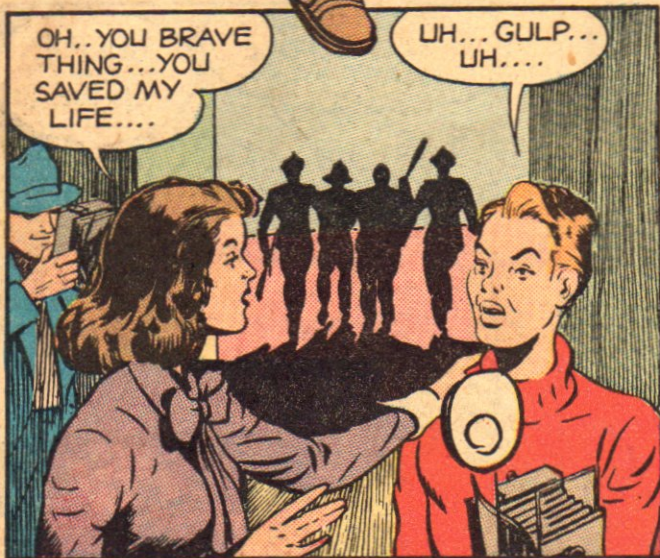
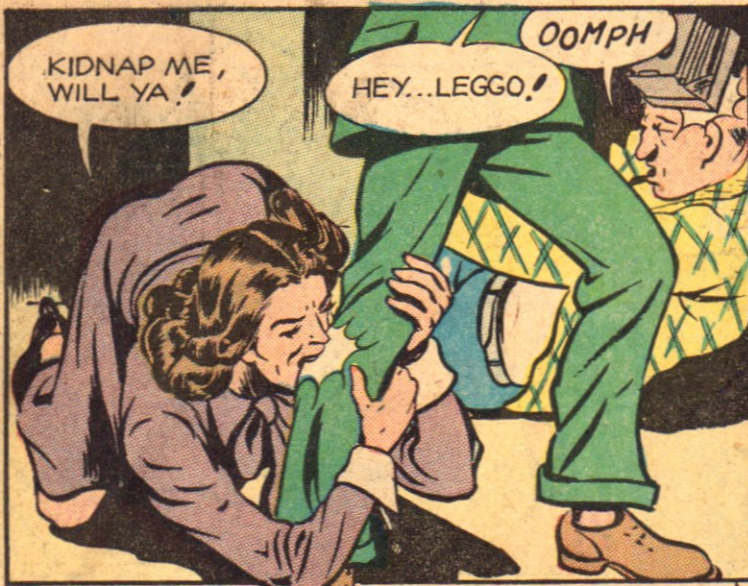


KID CLICK











U. S. C A M E R A

America's Finest Monthly Photographic Magazine

If photography's your hobby—or if it's going to be; or if you're just interested in looking at good pictures—this is the magazine for you.

Every month its 72 big pages are crammed full of interesting photos; stories about well-known photographers and articles on how to take expert-like pictures and become an ace cameraman.

U. S. CAMERA is Big—pages the size of *Life*—it's filled with pictures and there's good reading in it for every member of the family, young or old. It's the biggest bargain in photographic magazines—only \$1.50 for a full year's subscription.

Published by the publishers of CAMERA COMICS

SUBSCRIBE NOW —

Send this coupon for your
12 issues of U. S. CAMERA

U. S. Camera Publishing Corp.
420 Lexington Avenue, New York 17, N. Y.

Here's my \$1.50. Send me the next twelve issues of U. S. Camera.
Please enter my year's subscription right away.

NAME JVV-NARFSTAR

STREET ADDRESS

CITY ZONE STATE

"Here's one for the book!"



Full-size preview of your snapshots
Brownie Reflex
 Synchro model

You see your subject in full picture size—sharp and clear—in the hooded view-finder. You get $1\frac{5}{8}$ " square pictures, readily enlarged. Shoots 12 without reloading. Brownie Reflex, one of many cameras in the Kodak line, costs less than you think. See your dealer.



**Snapshots are always fun to make . . .
 fun to see . . . fun to share**

Fun is fun all over again when your friends see themselves in snapshots. They're glad you wanted their picture. Snapshots make close friends closer. Yes, you can count on a thrill every time you show your snapshots.

And picture-making is so *easy*. You simply frame your picture and "click." Be sure you keep your Brownie handy—always loaded with Kodak Verichrome Film. Verichrome takes the guesswork out of picture-making. You press the button—it does the rest . . . Eastman Kodak Co., Rochester 4, N. Y.

America's favorite snapshots are
 made on Kodak Verichrome Film
 —in the familiar yellow box

Kodak